Oracle® Application Server 10*g*

Forms and Reports Services Installation Guide

10*g* (9.0.4) for Microsoft Windows

Part No. B13642-01

March 2004

ORACLE®

Oracle Application Server 10*g* Forms and Reports Services Installation Guide, 10*g* (9.0.4) for Microsoft Windows

Part No. B13642-01

Copyright © 2003, 2004 Oracle. All rights reserved.

Primary Author: Anjana Suparna Sriram

Contributors: Orlando Cordero, Ken Chu, Lypp-tek Khoo-Ellis, Rohit Marwaha, Rajesh Ramachandran, Navneet Singh, Ingrid Snedecor, Gour Kishore Saha, Robin Zimmermann

Contents

4   Compatibility with Earlier Versions

5   Requirements

6 Things You Should Know Before Starting the Installation

7 Post-Installation Tasks

A Troubleshooting

B Deinstallation and Reinstallation

C URLs for Components

D Java Access Bridge Installation

Index

Send Us Your Comments

Oracle Application Server 10*g* Forms and Reports Services Installation Guide, 10*g* (9.0.4) for Microsoft Windows

Part No. B13642-01

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, please indicate the title and part number of the documentation and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: appserver_docs@oracle.com
- FAX: (650) 506-7375.   Attn: Oracle Application Server Documentation Manager
- Postal service:

  Oracle Corporation
  Oracle Application Server Documentation
  500 Oracle Parkway, M/S 1op6
  Redwood Shores, CA 94065
  USA

If you would like a reply, please give your name, address, telephone number, and electronic mail address (optional).

If you have problems with the software, please contact your local Oracle Support Services.

Preface

The *Oracle Application Server 10g (9.0.4) Forms and Reports Services* installation guide covers requirements, new features in the installer, concepts that affect installation, compatibility with other products, post-installation tasks, and troubleshooting tips.

Intended Audience

This guide is intended for users who are comfortable performing some system administration operations, such as creating users and groups, adding users to groups, and installing operating system patches on the computer where Oracle Application Server 10g (9.0.4) Forms and Reports Services (Forms and Reports Services) is going to be installed. Users who are installing Forms and Reports Services need root access to run some scripts.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at

http://www.oracle.com/accessibility/

Accessibility of Code Examples in Documentation   JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation   This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Structure of This Guide

This guide contains the following chapters:

Chapter 1, "Introduction to Oracle Application Server 10g (9.0.4) Forms and Reports Services"

This chapter introduces you to Oracle Application Server 10*g* (9.0.4) Forms and Reports Services and provides an overview of the components.

Chapter 2, "Installation Overview"

This chapter provides an overview of the installation steps.

Chapter 3, "What is New in the Installation"

This chapter describes new features in Oracle Application Server 10*g* (9.0.4) Forms and Reports Services that affect the installation procedure.

Chapter 4, "Compatibility with Earlier Versions"

This chapter describes compatibility issues that you might encounter if you install and run Forms and Reports Services on a computer that is already running other products.

Chapter 5, "Requirements"

This chapter lists the requirements for installing and running Forms and Reports Services.

Chapter 6, "Things You Should Know Before Starting the Installation"

This chapter explains important concepts and other information that you need to know before you perform installation. By understanding how the components fit together can help you make some important installation decisions.

Chapter 7, "Post-Installation Tasks"

This chapter describes any post-installation tasks that you need to perform to ensure complete installation of Forms and Reports Services.

Appendix A, "Troubleshooting"

This appendix lists troubleshooting information on problems that might arise during installation. It also describes the configuration assistants run by the installer.

Appendix B, "Deinstallation and Reinstallation"

This appendix describes how to remove and reinstall Forms and Reports Services from your computer.

Appendix C, "URLs for Components"

This appendix lists the URLs that you can use to access components after installation.

Appendix D, "Java Access Bridge Installation"

This appendix describes how to install the Java Access Bridge that enables assistive technologies to read Java-based interfaces (such as the installer) running on Windows platforms.

Related Documents

For more information, see the following documents:

- *Oracle Application Server 10g Forms and Reports Services Release Notes*

- *Oracle Application Server Reports Services Publishing Reports to the Web*

- *Oracle Reports Building Reports*

- *Getting Started with Oracle Reports*, available on the Oracle Technology Network (http://otn.oracle.com/products/reports/)

  The Index page of Getting Started with Oracle Reports provides access to Reports documentation not available on the main OTN Reports Documentation page. You can select from the Topic and Collateral Type lists to view any Reports document, including online help and tech notes.

- *Oracle Forms Migrating Forms Applications from Forms 6i*

- *Oracle Application Server Forms Services Deployment Guide 10g (9.0.4) for Windows and UNIX*

Conventions

This guide uses the following conventions:

Convention	Meaning
boldface text	Boldface type in text indicates objects (such as buttons and fields) on screens.
`code`	Text in the code font indicates file names, commands, or contents of configuration files.
`italicized code`	Italicized code indicates placeholder text that you need to replace with an appropriate value.
[ ]	Brackets enclose optional clauses from which you can choose one or none.
. . .	Ellipses indicate that extraneous information have been omitted.

1

Introduction to Oracle Application Server 10*g* (9.0.4) Forms and Reports Services

Oracle Application Server 10*g* (9.0.4) Forms and Reports Services allows you to install and configure Forms and Reports Services without the need to install and configure all of Oracle Application Server 10*g* (9.0.4).

This type of installation is best suited for users who want to upgrade Forms applications to the Grid environment in two phases. In phase one, they move to the Grid environment by upgrading their client/server-based Forms applications to Web-based ones. In phase two, users can then choose to use the services offered by an existing Oracle Application Server Infrastructure installation.

1.1 Restrictions with this Installation Type

Forms and Reports Services provides no Infrastructure service, such as Single Sign-On or Identity Management integration. However, Infrastructure services are available with the Business Intelligence and Forms Installation type.

Furthermore, it is not possible to associate or link this installation with an Infrastructure at a later point in time.

If you wish to take advantage of Infrastructure features, you will need to install an instance of Oracle Application Server with Business Intelligence and Forms, and move your applications to this new installation.

1.2 Available Features with this Installation Type

When you install Forms and Reports Services, you will have access to these features:

- Oracle Application Server Forms Services
- Oracle Application Server Reports Services
- Oracle HTTP Server
- Oracle Application Server Web Cache
- Oracle Application Server Containers for J2EE (OC4J)
- Oracle Enterprise Manager
- Oracle Process and Management Notification (OPMN)
- Distributed Configuration Management (DCM)

1.2.1 Oracle Application Server Forms Services

Oracle Application Server Forms Services deploys Forms applications with database access to Java clients in a Web environment. Oracle Application Server Forms Services automatically optimizes class downloads, network traffic, and interactions with the Oracle database. Forms applications are automatically load-balanced across multiple servers; thus, they can easily scale to service any number of requests.

1.2.2 Oracle Application Server Reports Services

Oracle Application Server Reports Services provides an easy-to-use, scalable, and manageable solution for high-quality database publishing and reporting. It enables you to implement a multi-tiered architecture for running your reports.

1.2.3 Oracle HTTP Server

Oracle HTTP Server, built on Apache Web server technology, is the Web server that Oracle Application Server uses. It offers scalability, stability, speed, and extensibility. It also supports Java servlets, Java Server Pages (JSPs), Perl, PL/SQL, and CGI applications.

1.2.4 Oracle Application Server Web Cache

Oracle Application Server Web Cache is a server-accelerator caching service that improves the performance, scalability, and availability of frequently used Oracle E-business Web sites that run on the Oracle platform. By storing frequently accessed URLs in virtual memory, Oracle Application Server Web Cache eliminates the need to repeatedly process requests for those URLs on the Web server. It also caches both static and dynamically-generated HTTP content from one or more applications Web servers.

1.2.5 Oracle Application Server Containers for J2EE (OC4J)

Oracle Application Server Containers for J2EE is a complete set of J2EE containers written entirely in Java that execute on the Java Virtual Machine (JVM) of the standard Java Development Kit (JDK).

1.2.6 Oracle Enterprise Manager

Oracle Enterprise Manager Application Server Control (henceforth referred to as Application Server Control) provides you with Web-based management tools that you need to monitor, administer, and configure multiple Oracle Application Server instances and its components. By default, Application Server Control is installed with every instance of Oracle Application Server. You can deploy applications, manage security, and create and manage Oracle Application Server clusters.

Application Server Control consists of the following:

- The Enterprise Manager Home pages you use to manage Oracle Application Server and its components. These Web pages provide you with a high-level view of your Oracle Application Server environment. From these pages you can drill down for more detailed information on administration, configuration, and performance monitoring. These pages also allow you to administer the application server and its components and deployed applications.

- The underlying software technologies that keep track of your application server instances and components. These technologies automatically perform the

necessary management tasks. For example, they discover the components of each application server instance, gather, and process performance data, and provide access to application configuration information.

1.2.7 Oracle Process and Management Notification (OPMN)

OPMN provides process control and monitoring services for application server instances and their components. It gathers component status information, and distributes the information to the relevant components. The Application Server Control uses OPMN for such tasks as starting and stopping the components of your application server instance.

1.2.8 Distributed Configuration Management (DCM)

DCM manages configurations among Oracle Application Server instances that are associated with a common Metadata Repository. It enables cluster-wide deployment of Oracle Application Server; thus, enabling you to deploy an application to one instance and have it automatically propagated to the entire cluster. You can also make a single host or instance configuration change to one instance and have it propagated across all instances in the cluster. Application Server Control uses DCM to make configuration changes and to propagate configuration changes and deployed applications across the cluster.

2

Installation Overview

Oracle Application Server 10*g* (9.0.4) Forms and Reports Services is an Oracle Application Server 10*g* (9.0.4) installation option. It is highly recommended that you read this guide in its entirety to ensure a successful installation and to optimize the capabilities of this release.

There are a few restrictions with this installation. See Section 1.1, "Restrictions with this Installation Type" for more information

To install Forms and Reports Services, follow these steps:

1. Read the latest versions of the following Release Notes:

   - *Oracle Application Server 10g (9.0.4) Forms and Reports Services Release Notes* contain release notes for OracleAS Forms Services, Oracle Forms Developer, OracleAS Reports Services, and Oracle Reports Developer. In addition, the *Oracle Application Server 10g (9.0.4) Forms and Reports Services Release Notes* contains information about the features that are available in this installation type.

   - *Oracle Application Server 10g (9.0.4) Release Notes* contains general information about Oracle Application Server 10*g* (9.0.4), as well as references to other sources of information. You can find the latest version of the release notes document on the Oracle Technology Network (`http://otn.oracle.com/documentation/ias.html`).

2. Start the Oracle Universal Installer (OUI). The Welcome screen appears.

3. On the Welcome screen, click **Next**.

4. On the Specify File Locations screen, enter the following information:

   - **Name**: A name to identify this Oracle home. This name cannot contain spaces and has a maximum length of 16 characters.

     Example: orawinfrs

   - **Destination Path**: The full path to the destination directory (Oracle home). If the directory specified does not exist, the installer creates it with administrative privileges.

     Example: `c:\oracle\`orawinfrs

5. Click **Next**.

6. The Available Product Components screen appears. This screen lists the components that you can install as part of Forms and Reports Services.

7. Optionally, if you need to install additional languages, click **Product Languages** on the Available Product Components screen:

a. The Language Selection screen appears.

b. Select the required language from the available languages list.

c. Click **OK** to return to the Available Product Components screen.

> **Note:** By default, the Installer installs Forms and Reports Services with text in English and in the operating system language.

8. Click **Next**.

9. The Specify Instance Name and ias_admin Password screen appears.

   - **Instance Name**: Enter a name for this instance. Instance names can only contain alphanumeric and underscore characters. If you have more than one Oracle Application Server 10*g* (9.0.4) Forms and Reports Services instance on a computer, the instance name must be unique.

   - **ias_admin Password** and **Confirm Password**: Enter a password for the ias_admin user. This is the administrative user for the instance. By default, the password must have a minimum of five alphanumeric characters and at least one of the characters must be a number.

> **Note:** Each Forms and Reports Services instance has its own password, regardless of the user performing the installation. Passwords are not shared across instances even if the instances are installed by the same user.

10. Click **Next**.

11. The Provide Outgoing Mail Server Information screen appears. Enter the outgoing mail (SMTP) server used by Oracle Application Server Reports Services.

> **Note:** This field is optional. However, you cannot distribute reports through email until you have configured the mail server information. Refer to Oracle Application Server Reports Services Publishing Reports to the Web for more information on how to specify the outgoing mail server information.

12. Click **Next**.

13. The Summary screen appears. This window lists all the components that will be installed.

14. Click **Install** to complete the installation. The Summary screen shows the progress of the installation.

> **Note:** At any time during the installation, click **Cancel** to exit.

3

What is New in the Installation

This chapter contains information about new installation features for Oracle Application Server 10*g* (9.0.4) Forms and Reports Services (Forms and Reports Services) in the following sections:

- Section 3.1, "Ports"

- Section 3.2, "Default Port Numbers"

- Section 3.3, "One ias_admin User Per Oracle Application Server 10g (9.0.4) Forms and Reports Services Instance"

- Section 3.4, "Support for Off-Network Installations"

- Section 3.5, "Support for DHCP"

- Section 3.6, "Support for IP Address and Hostname Changes After Installation"

- Section 3.7, "Windows 2000 Requires SP3 or Later"

- Section 3.8, "Changed Terminology"

- Section 3.9, "Configuration Assistant Enhancements"

- Section 3.10, "More Prerequisite Checks"

- Section 3.11, "Support for Generating Installation Statistics"

- Section 3.12, "Installation from DVD Now Available"

3.1 Ports

Many Forms and Reports Services components, such as Oracle HTTP Server, OracleAS Web Cache, and Oracle Enterprise Manager, use ports. You can have the installer assign default port numbers, or use port numbers that you specify. The following sections provide more information on the usage of ports:

- Section 3.1.1, "Using Default Port Numbers"

- Section 3.1.2, "Default Ports for Oracle HTTP Server Are 80 and 443"

- Section 3.1.3, "Custom Port Numbers"

- Section 3.1.4, "Using Custom Port Numbers (the "Static Ports" Feature)"

3.1.1 Using Default Port Numbers

If you want to use the default port numbers for such components, you do not have to do anything. See Section 3.2, "Default Port Numbers" for a list of the default port numbers and ranges.

Note the following points:

- The installer assigns the default ports to components only if the ports are not in use by other applications. If the default port is in use, the installer tries other ports in the port number range for the component. For example, the default non-SSL port for Oracle HTTP Server for the middle tier is port 80. If this port is in use by another application, the installer assigns a port in the 7777 - 7877 range.

- The installer no longer checks the `services` file to determine if a port is in use. In earlier releases, the installer would not assign a port number if the port number is listed in the file.

  The `services` file is located in the `C:\`*`SystemRoot`*`\system32\drivers\etc` directory, where *`SystemRoot`* is `winnt` on Windows NT and Windows 2000, and `windows` on Windows XP and Windows 2003.

3.1.2 Default Ports for Oracle HTTP Server Are 80 and 443

In Forms and Reports Services, the default ports for Oracle HTTP Server are port 80 for non-SSL and port 443 for SSL. This is different from the UNIX version of the product, which uses ports 7777 and 4443 as the default ports.

The installer assigns the default ports to components only if the ports are not in use by other applications. If a port is in use, the installer tries other ports in the port number range for the component. For example, for Oracle HTTP Server, if port 80 is in use, the installer tries port numbers in the 7777 - 7877 range. See Section 3.2.2, "Default Port Numbers" for a complete list of default port numbers.

3.1.3 Custom Port Numbers

In Forms and Reports Services, you can specify custom port numbers for components, instead of having Oracle Universal Installer (OUI) assign default port numbers. This feature is called "static ports". To use static ports, you set up a file with component names and desired port numbers. OUI then uses the values from the file instead of the default port numbers.

> **See Also:**   For more details, see Section 3.1.4, "Using Custom Port Numbers (the "Static Ports" Feature)".

3.1.4 Using Custom Port Numbers (the "Static Ports" Feature)

To instruct the installer to assign custom port numbers for components:

1. Create a file that contains the component names and port numbers. Section 3.1.4.1, "Format of the staticports.ini File" describes the file format. This file is typically called the `staticports.ini` file, but you can name it anything you want.

2. When you start up the installer, specify the appropriate parameter and the *full path* to the `staticports.ini` file on the command line.

For example, if you are installing Oracle Application Server 10*g* (9.0.4) Forms and Reports Services, use the following syntax (enter the command on one line):

CD-ROM (assumes E: is the CD-ROM drive):

```
E:\> setup.exe
      oracle.iappserver.iapptop:s_staticPorts=C:\fullpath\to\local\
      staticports.ini
```

DVD-ROM (assumes E: is the DVD-ROM drive):

```
E:\> cd orawinfrs
E:\orawinfrs> setup.exe
       oracle.iappserver.iapptop:s_staticPorts=C:\fullpath\to\local\
       staticports.ini
```

Note that you *always* have to specify the full path to the staticports.ini file. The reason is that the installer changes the current directory to a directory different from the one where you started the installer from. If you do not specify the full path to the file, the installer will not be able to find the file. The installer will then assign default ports for all the components without displaying any warning.

3.1.4.1 Format of the staticports.ini File

The staticports.ini file has the following format (replace *port_num* with the port number that you want to use for the component).

```
Oracle HTTP Server port = port_num
Oracle HTTP Server Listen port = port_num
Oracle HTTP Server SSL port = port_num
Oracle HTTP Server Listen (SSL) port = port_num
Oracle HTTP Server Diagnostic port = port_num
Oracle HTTP Server Jserv port = port_num
Java Object Cache port = port_num
DCM Java Object Cache port = port_num
Oracle Notification Server Request port = port_num
Oracle Notification Server Local port = port_num
Oracle Notification Server Remote port = port_num
Application Server Control port = port_num
Application Server Control RMI port = port_num
Oracle Management Agent port = port_num
Web Cache HTTP Listen port = port_num
Web Cache HTTP Listen (SSL) port = port_num
Web Cache Administration port = port_num
Web Cache Invalidation port = port_num
Web Cache Statistics port = port_num
Reports Services SQL*Net port = port_num
Oracle Certificate Authority SSL Server Authentication port = port_num
Oracle Certificate Authority SSL Mutual Authentication port = port_num
Log Loader port = port_num
```

The easiest way to create the file is to use the staticports.ini file on the CD-ROM (Disk 1) or DVD as a template:

1. Copy the staticports.ini file from the CD-ROM or DVD to your hard disk.

Table 3–1   Location of the staticports.ini File on CD-ROM and DVD

Media	Location of staticports.ini File
CD-ROM	Disk 1: E:\stage\Response\staticports.ini
DVD	E:\orawinfrs\stage\Response\staticports.ini

2. Edit the local copy (the file on the hard disk) to include the desired port numbers.

You do not need to specify port numbers for all components in the staticports.ini file. If a component is not listed in the file, the installer uses the default port number for that component.

The following example sets the Application Server Control port and the some ports for OracleAS Web Cache. For components not specified, the installer will assign the default port numbers.

```
Application Server Control port = 2000
Web Cache Administration port = 2001
Web Cache Invalidation port = 2002
Web Cache Statistics port = 2003
```

When installation is complete, you can check the
ORACLE_HOME\install\portlist.ini file to see the assigned ports.

The installer verifies that the ports specified in the file are available by checking
memory. This means that it can only detect ports that are being used by running
processes. It does not look in configuration files to determine which ports an
application is using.

If the installer detects that a specified port is not available, it displays an alert. The
installer will not assign a port that is not available. To fix this:

1. Edit the staticports.ini file to specify a different port, or shut down the
   application that is using the port.

2. Click **Retry**. The installer re-reads the staticports.ini file and verifies the
   entries in the file again.

> **Tip:** The staticports.ini file uses the same format as the
> ORACLE_HOME\install\portlist.ini file, which is created
> *after* an Oracle Application Server 10*g* (9.0.4) Forms and Reports
> Services installation. If you have installed Forms and Reports
> Services and you want to use the same port numbers in another
> installation, you can use the portlist.ini file from the first
> installation as the staticports.ini file for subsequent
> installations.

3.1.4.2 Error Conditions That Will Cause the Installer to Use Default Ports Instead of Specified Ports

Check your staticports.ini file carefully because a mistake can cause the installer
to use default ports without displaying any warning. Here are some things that you
must check:

- If you specify the same port for more than one component, the installer will use
  the specified port for the first component, but for the other components, it will use
  the components' default ports. The installer does not warn you if you have
  specified the same port for multiple components.

- If you have syntax errors in the staticports.ini file (for example, if you
  omitted the = character for a line), the installer ignores the line. For the
  components specified on such lines, the installer assigns the default ports. The
  installer does not display a warning for lines with syntax errors.

- If you misspell a component name, the installer assigns the default port for the
  component. Names of components in the file are case sensitive. The installer does
  not display a warning for lines with unrecognized names.

- If you specify a non-numeric value for the port number, the installer ignores the
  line and assigns the default port number for the component. It does this without
  displaying any warning.

- If you misspell the parameter on the command line, the installer does not display a
  warning. It continues and assigns default ports to all components.

- If you specify a relative path to the staticports.ini file (for example,
  ".\staticports.ini" or just "staticports.ini") on the command line, the

installer will not find the file. The installer continues without displaying a warning and it will assign default ports to all components. You must specify a full path to the `staticports.ini` file.

■ If the parameter you specify on the command line does not match the installation type that you are performing (for example, if you specify the parameter for middle tier but you are installing the infrastructure), the installer does not give a warning. It continues and assigns default ports to all components.

3.1.4.3 Ports for Oracle HTTP Server and OracleAS Web Cache

In the `httpd.conf` file for Oracle HTTP Server, the `Port` and the `Listen` directives specify the ports used by OracleAS Web Cache and Oracle HTTP Server. The correct lines in the `staticports.ini` file for setting these ports depend on which components you are configuring.

If You Are Configuring OracleAS Web Cache and Oracle HTTP Server

1. Set the port for OracleAS Web Cache.

   OracleAS Web Cache uses the port specified by the `Port` directive (Figure 3–1). To set this port, use this line in the `staticports.ini` file:

   ```
   Web Cache HTTP Listen port = port_number
   ```

   To configure the SSL port for OracleAS Web Cache, use the following line:

   ```
   Web Cache HTTP Listen (SSL) port = port_number
   ```

   You cannot set the port number using the "Oracle HTTP Server port" line in this case. If your `staticports.ini` file contains both "Oracle HTTP Server port" and "Web Cache HTTP Listen port", the "Oracle HTTP Server port" line is ignored. For example, if you have these lines in `staticports.ini`:

   ```
   Web Cache HTTP Listen port = 7979
   Oracle HTTP Server port = 8080
   ```

   the `Port` directive would be set to 7979.

2. Set the port for Oracle HTTP Server.
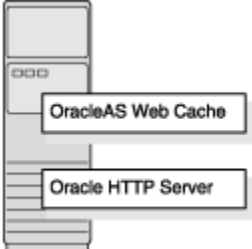
   Oracle HTTP Server uses the port specified by the `Listen` directive. To set this port, use this line in the `staticports.ini` file:

   ```
   Oracle HTTP Server Listen port = port_number
   ```

   To configure the SSL Listen port, use the following line:

   ```
   Oracle HTTP Server Listen (SSL) port = port_number
   ```

Figure 3–1   Configuring Both OracleAS Web Cache and Oracle HTTP Server

If You Are Configuring Oracle HTTP Server Only (no OracleAS Web Cache)

If you are configuring Oracle HTTP Server only, then Oracle HTTP Server uses both `Port` and `Listen` directives (Figure 3–2). In this case, you must set both directives to use the same port number.

To set these ports, use the "Oracle HTTP Server port" and "Oracle HTTP Server Listen port" lines in the `staticports.ini` file. For example:

```
Oracle HTTP Server port = 8080
Oracle HTTP Server Listen port = 8080
```

To set the SSL version of these ports, use the following lines. As in the non-SSL version, the port numbers must be the same.

```
Oracle HTTP Server SSL port = 443
Oracle HTTP Server Listen (SSL) port = 443
```

If you also specify the Web Cache lines in `staticports.ini`, they will be ignored because you are not configuring OracleAS Web Cache.

Figure 3–2   Configuring Only Oracle HTTP Server
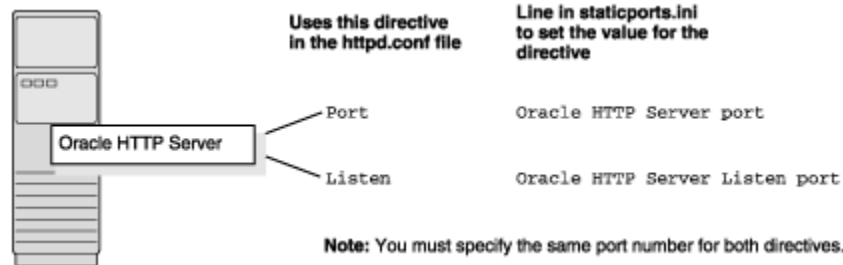
3.1.4.4 Examples

This section describes some common scenarios for using `staticports.ini`.

- Section 3.1.4.4.1, "Configure Oracle HTTP Server to Use Ports 80 and 443 With OracleAS Web Cache as the Front-End"
- Section 3.1.4.4.2, "Configure Oracle HTTP Server to Use Ports 80 and 443 Without OracleAS Web Cache"

3.1.4.4.1   Configure Oracle HTTP Server to Use Ports 80 and 443 With OracleAS Web Cache as the Front-End In this scenario, create a `staticports.ini` file that includes the following lines:

```
Web Cache HTTP Listen port = 80
Oracle HTTP Server Listen port = 81
Web Cache HTTP Listen (SSL) port = 443
Oracle HTTP Server Listen (SSL) port = 444
```

The ports for Oracle HTTP Server Listen and SSL Listen can be any available port. The example uses ports 81 and 444.

3.1.4.4.2   Configure Oracle HTTP Server to Use Ports 80 and 443 Without OracleAS Web Cache
In this scenario, create a `staticports.ini` file that includes the following lines:

```
Oracle HTTP Server port = 80
Oracle HTTP Server Listen port = 80
Oracle HTTP Server SSL port = 443
```

```
Oracle HTTP Server Listen (SSL) port = 443
```

3.2 Default Port Numbers

By default, the installer assigns port numbers to components from a set of default port numbers. If you want to use a different set of port numbers, you have to create a file called staticports.ini, in which you list the port numbers that you want to use. See Section 3.1.4, "Using Custom Port Numbers (the "Static Ports" Feature)" for details.

3.2.1 Method of Assigning Default Port Numbers

The installer assigns default port numbers to each component using the following method:

1. The installer checks if the default port number is in use. If it is not in use, the installer assigns it to the component.

2. If the default port number is already in use by an Oracle product or by any running application, the installer tries the lowest number in the port number range. It keeps trying the port numbers in the range until it finds one that is available.

3.2.2 Default Port Numbers

Table 3–2 lists the default port numbers for components. The last column, Name in staticports.ini, specifies the component name as it appears in the staticports.ini file, which enables you to override the default port numbers. See Section 3.1.4, "Using Custom Port Numbers (the "Static Ports" Feature)" for details.

Table 3–2   Default Port Numbers and Ranges (Grouped by Component)

Component	Default Port	Port Number Range	Name in staticports.ini
Oracle Process Manager and Notification Server (OPMN)			
Oracle Notification Server Request Port	6003	6003 - 6099	`Oracle Notification Server Request port`
Oracle Notification Server Local Port	6100	6100 - 6199	`Oracle Notification Server Local port`
Oracle Notification Server Remote Port	6200	6200 - 6299	`Oracle Notification Server Remote port`
Oracle Application Server Containers for J2EE (OC4J)			
OC4J AJP	3301	3301 - 3400	Not settable
OC4J RMI	3201	3201 - 3300	Not settable
JMS	3701	3701 - 3800	Not settable
IIOP	3401	3401 - 3500	Not settable
IIOPS1	3501	3501 - 3600	Not settable
IIOPS2	3601	3601 - 3700	Not settable
OracleAS Forms Services			

Table 3–2 (Cont.) Default Port Numbers and Ranges (Grouped by Component)

Component	Default Port	Port Number Range	Name in staticports.ini
Oracle Application Server Forms Services	--	--	Uses the same port as Oracle HTTP Server.
Oracle HTTP Server			
Oracle HTTP Server Listener (OracleAS Web Cache **not** configured)	80	7777 - 7877	`Oracle HTTP Server Listen port`
Oracle HTTP Server Listener (SSL)	443	4443 - 4543	`Oracle HTTP Server Listen (SSL) port`
Oracle HTTP Server Listener (non-SSL, OracleAS Web Cache configured)	80	7777 - 7877	`Oracle HTTP Server port`
Oracle HTTP Server Listener (SSL, OracleAS Web Cache configured)	443	4443 - 4543	`Oracle HTTP Server SSL port`
JServ servlet engine	8007	8007 - 8107	`Oracle HTTP Server Jserv port`
Java Object Cache	7000	7000 - 7099	`Java Object Cache port`
DCM Java Object Cache	7100	7100 - 7199	`DCM Java Object Cache port`
SOAP server	9998	9998 - 9999	Not settable
Port Tunneling	7501	7501 - 7599	Not settable
Oracle HTTP Server Diagnostic port	7200	7200 - 7299	`Oracle HTTP Server Diagnostic port`
OracleAS Reports Services			
SQL*Net (for 6*i* backward compatibility only)	1950	1950 - 1960	`Reports Services SQL*Net port`
Oracle Application Server Reports Services Visigenics CORBA	14000	14000 - 14010	Not settable
OracleAS Web Cache			
OracleAS Web Cache - HTTP Listener	80	7777 - 7877	`Web Cache HTTP Listen port`
OracleAS Web Cache - HTTP Listener (SSL)	443	4443 - 4543	`Web Cache HTTP Listen (SSL) port`
OracleAS Web Cache Administration	4000	4000 - 4300	`Web Cache Administration port`
OracleAS Web Cache Invalidation	4001	4000 - 4300	`Web Cache Invalidation port`
OracleAS Web Cache Statistics	4002	4000 - 4300	`Web Cache Statistics port`
Oracle Enterprise Manager Application Server Control			
Application Server Control	1810	1810 - 1829	`Application Server Control port`
Application Server Control - RMI	1850	1850 - 1869	`Application Server Control RMI port`

Table 3–2 (Cont.) Default Port Numbers and Ranges (Grouped by Component)

Component	Default Port	Port Number Range	Name in staticports.ini
Application Server Control - SSL	1810	1810 - 1829	This port number is assigned after installation, when you configure Application Server Control for SSL. See *Oracle Application Server 10g Administrator's Guide* for details.
Log Loader	44000	44000 - 44099	`Log Loader port`
OracleAS Certificate Authority			
Server Authentication Virtual Host	4400	4400 - 4419	`Oracle Certificate Authority SSL Server Authentication port`
Mutual Authentication Virtual Host	4401	4400 - 4419	`Oracle Certificate Authority SSL Mutual Authentication port`

3.3 One ias_admin User Per Oracle Application Server 10*g* (9.0.4) Forms and Reports Services Instance

In 10*g* (9.0.4), each instance of Oracle Application Server 10*g* (9.0.4) Forms and Reports Services has its own ias_admin user. Even if you install multiple Forms and Reports Services instances on the same computer using the same operating system user, you would need to provide new passwords for each ias_admin user.

3.4 Support for Off-Network Installations

Off-network installation refers to installing Forms and Reports Services on a computer that is not connected to a network. After installation, you can connect the computer to the network and make some configuration changes to Forms and Reports Services to make it ready to run and process requests.

Off-network installations are supported for these platforms:

- Linux

- Microsoft Windows

It is not supported for Solaris. This should not be an issue since most Solaris machines are networked.

3.5 Support for DHCP

Forms and Reports Services is supported on computers that use DHCP on these platforms:

- Linux

- Microsoft Windows

Forms and Reports Services is not supported for Solaris with DHCP.

3.6 Support for IP Address and Hostname Changes After Installation

Forms and Reports Services supports IP address changes after installation for all installation types except for the OracleAS Developer Kits 10*g* installation type.

For hostname changes, this is supported only for computers running OracleAS middle tiers. It is not supported for computers running OracleAS Infrastructure 10*g* or OracleAS Developer Kits 10*g*.

If you change the hostname or IP address after installation (using operating system commands or editing operating system configuration files), you need to use Application Server Control to update the information in Forms and Reports Services configuration files. See the *Oracle Application Server 10g Administrator's Guide* for details.

3.7 Windows 2000 Requires SP3 or Later

You could install Release 2 (9.0.2) and Release 2 (9.0.3) on Windows 2000 with Service Pack 1 or 2.

For 10*g* (9.0.4), if you are running Windows 2000, you need Service Pack 3 or later. Service Pack 2 is no longer sufficient.

3.8 Changed Terminology

Table 3–3 lists terms updated in 10*g* (9.0.4). The 10*g* (9.0.4) documentation set uses the new terms.

Table 3–3   Updated Terms

Term in Release 2 (9.0.2)	Term in 10*g* (9.0.4)
Oracle Enterprise Manager Web site	Oracle Enterprise Manager Application Server Control, or Application Server Control for short
Oracle Management Server	Oracle Management Service

3.9 Configuration Assistant Enhancements

In Oracle Application Server 10*g* (9.0.4) Forms and Reports Services, configuration assistants are enhanced with these features:

- The configuration assistants write log files in a central location.

- The configuration assistants write more understandable error messages in the log files.

- You can rerun configuration assistants that have failed.

For details, see Appendix A, "Troubleshooting".

3.10 More Prerequisite Checks

In 10*g* (9.0.4), the installer performs more prerequisite checks to ensure that your computer meets the minimum requirements. See Section 5.6, "Prerequisite Checks Performed by the Installer" for a list of checks.

3.11 Support for Generating Installation Statistics

The installer now provides command line options for monitoring resources used for installation. The following options are supported:

- `-printtime` prints the time taken for installation.

- `-printmemory` prints the memory used for installation.

- `-printdiskusage` prints the disk space used for installation.

Example: the following command prints information for all three items:

```
setup.exe -printtime -printmemory -printdiskusage
```

3.12 Installation from DVD Now Available

Oracle Application Server 10*g* (9.0.4) Forms and Reports Services is now available on a DVD-ROM disk. It is also still available on CD-ROMs. A benefit of installing from the DVD is that you do not have to swap disks during installation, which is something you have to do if you are installing from CD-ROM.

4

Compatibility with Earlier Versions

This chapter outlines the compatibility matrix, known issues and workarounds that you should be aware of when you have a configuration that includes different versions of Oracle Forms and Oracle Reports with Oracle Application Server 10*g* (9.0.4) Forms and Reports Services in the following sections:

- Section 4.1, "Compatibility with Earlier Versions and Release 10g (9.0.4)"

- Section 4.2, "Interoperability Issues and Workarounds"

4.1 Compatibility with Earlier Versions and Release 10*g* (9.0.4)

Table 4–1 shows a compatibility matrix of earlier versions of Oracle Forms and Oracle Reports.

Notes about the table:

- The **Clients** column refers to all the clients of Oracle Reports and Oracle Forms.

- The **Reports/Forms Server** column refers to the different releases of Oracle Forms and Oracle Reports server.

- The **Supported** column refers to backward compatibility between client and server.

Table 4–1   Oracle Application Server 10g (9.0.4) Forms and Reports Services Compatibility Matrix

Clients	Reports/Forms Server	Supported?	Comments
Oracle Reports *6i* Clients ■ `rwcgi60` ■ `rwcli60` ■ `rwrqv60` ■ `rwservlet`	Oracle Application Server 10*g* (9.0.4) Reports Services	**Yes**	Using `rwproxy`; shipped with 10*g*
Oracle9*i* (9.0.2) Reports Clients ■ `rwcgi` ■ `rwclient` ■ `rwrqv` ■ `rwservlet`	Oracle Application Server 10*g* (9.0.4) Reports Services	**Yes**	None
Oracle Reports 10*g* Clients ■ `rwcgi` ■ `rwclient` ■ `rwrqv` ■ `rwservlet`	*i*AS Release 2 (9.0.2) Reports Services	**Yes**	None
Oracle Reports 10*g* Clients ■ `rwcgi` ■ `rwclient` ■ `rwrqv` ■ `rwservlet`	*6i* Reports Server	**No**	None
Oracle Forms *6i* Clients	*i*AS Release 1 (1.0.2.x) Forms Services	**Yes**	None
Oracle9*i* Forms Clients	*i*AS Release 2 (9.0.2) Forms Services	**Yes**	None
Oracle Forms 10*g* Clients	Oracle Application Server 10*g* (9.0.4) Forms Services	**Yes**	9.0.2 and 9.0.4 can use the same runtime files (FMX, PLX, MMX, etc.) without recompilation. For example, an FMX complied with 9.0.2 can be used with a 9.0.4 installation.

4.2 Interoperability Issues and Workarounds

This section describes the known issues and workarounds that you should be aware of when you have a configuration that includes different versions of application server instances:

■ Section 4.2.1, "Oracle Enterprise Manager for 9.0.2/9.0.3 and 10g (9.0.4) Uses the Same Port (Port 1810)"

■ Section 4.2.2, "dcmctl getState Command from a 10g (9.0.4) Instance Cannot Be Used With 9.0.2 or 9.0.3 Instances"

■ Section 4.2.3, "Oracle Enterprise Manager: No Rollup Metrics for 9.0.2 Middle Tiers"

4.2.1 Oracle Enterprise Manager for 9.0.2/9.0.3 and 10*g* (9.0.4) Uses the Same Port (Port 1810)

In 9.0.2 and 9.0.3, the installer assigns port 1810 to the Oracle Enterprise Manager Web Site, regardless of whether or not the port is already in use. If the computer where you plan to install the 9.0.2/9.0.3 instances already has a 10*g* (9.0.4) instance, the Oracle Enterprise Manager Application Server Control component for the 10*g* (9.0.4) instance might already be using port 1810.

> **Tip:** In 10*g* (9.0.4), you can specify custom port numbers to use for each component. See Section 3.1.4, "Using Custom Port Numbers (the "Static Ports" Feature)".

For the case where Oracle Enterprise Manager 9.0.2/9.0.3 and 10*g* (9.0.4) are configured on the same port (1810), you can change the port used by the 10*g* (9.0.4) Oracle Enterprise Manager to a different port. You can then run both Oracle Enterprise Managers at the same time. To change the port on the 10*g* (9.0.4) Oracle Enterprise Manager, perform these steps:

1. In the 10*g* (9.0.4) home, edit the `ORACLE_HOME\sysman\j2ee\config\emd-web-site.xml` file and change the port value from 1810 to an unused port. The following example sets the port to 1814:

   ```
   <web-site host="[ALL]" port="1814" display-name="Oracle Enterprise Manager
    iAS Console Website" secure="false">
   ```

   If the 9.0.2/9.0.3 instance is using 1810, it is also likely that the instance is using port 1811 for RMI operations. With the 9.0.2/9.0.3 Oracle Enterprise Manager running, check which port in the 1810-1829 range is unused, and use this value.

   You can run the `netstat` command to determine which ports are in use. The following example checks if port 1814 is in use.

   ```
   prompt> netstat -n | grep 1814
   ```

2. Also in the 10*g* (9.0.4) home, enter the same port number in the `ORACLE_HOME\sysman\emd\targets.xml` file. The port number is specified in the `StandaloneConsoleURL` property of the `oracle_ias` target.

   ```
   <Target TYPE="oracle_ias" NAME="infra.myhost.oracle.com" VERSION="1.0">
      ... lines not shown ...
      <Property NAME="StandaloneConsoleURL"
              VALUE="http://myhost.oracle.com:1814/emd/console"/>
   ```

Once you have updated these two files, you can run BOTH the 9.0.2/9.0.3 and 10*g* (9.0.4) Oracle Enterprise Managers at the same time.

4.2.2 dcmctl getState Command from a 10*g* (9.0.4) Instance Cannot Be Used With 9.0.2 or 9.0.3 Instances

If you run the `dcmctl getState` command from a 10*g* (9.0.4) instance to get information on a 9.0.2 or 9.0.3 instance, you would get an ADMN-604104 error:

```
prompt> dcmctl getState -i name_of_902_or_903_instance
ADMN-604104 Unable to connect to the OPMN process to obtain process status table
```

To get information on 9.0.2 or 9.0.3 instances using the `dcmctl` command, use the 9.0.2 or 9.0.3 `dcmctl` command.

4.2.3 Oracle Enterprise Manager: No Rollup Metrics for 9.0.2 Middle Tiers

Oracle Enterprise Manager Application Server Control 10*g* (9.0.4) does not monitor 9.0.2.x or 9.0.3.x instances. You have to use Oracle Enterprise Manager 9.0.2 or 9.0.3 to manage these instances.

5

Requirements

Before installing Oracle Application Server 10*g* (9.0.4) Forms and Reports Services, you must ensure that your computer meets the requirements described in this chapter.

This chapter contains the following sections:

- Section 5.1, "System Requirements"
- Section 5.2, "Windows System Files (wsf.exe)"
- Section 5.3, "Operating System User"
- Section 5.4, "Environment Variables"
- Section 5.5, "Network Topics"
- Section 5.6, "Prerequisite Checks Performed by the Installer"

5.1 System Requirements

Table 5–1 lists the system requirements for installing Forms and Reports Services. The installer checks many of these requirements at the start of the installation process and will warn you if any of them is not met. Refer to Table 5–6 to see which requirements are not checked by the installer.

You can also run the system checks performed by the installer without doing an installation, by running the `setup.exe` command as shown. The `setup.exe` command is on the Forms and Reports Services CD-ROM (Disk 1) or DVD (in the orawinfrs directory).

CD-ROM (assumes E: is the CD-ROM drive):

```
E:\> setup.exe -executeSysPrereqs
```

DVD (assumes E: is the DVD-ROM drive):

```
E:\> cd orawinfrs
E:\orawinfrs> setup.exe -executeSysPrereqs
```

The results are displayed on the screen as well as written to a log file. For more information on the types of checks performed, see Section 5.6, "Prerequisite Checks Performed by the Installer".

Table 5–1   System Requirements

Item	Requirement	Checked by Installer
Operating system	▪ Microsoft Windows NT 4.0 with Service Pack 6a ▪ Microsoft Windows 2000 with Service Pack 3 or above ▪ Microsoft Windows Server 2003 (32-bit) ▪ Microsoft Windows XP is supported only for these two types: - J2EE and Web Cache middle tier without OracleAS Infrastructure 10*g* - OracleAS Developer Kits 10*g* You can install other Forms and Reports Services installation types on Windows XP (the installer displays a warning, but allows you to continue), but they are not supported on Windows XP. **Note:** Oracle Application Server 10*g* (9.0.4) Forms and Reports Services is **not supported** on Windows operating systems that include Terminal Services (for example, Windows NT Terminal Server Edition and Windows 2000 with Terminal Services are not supported).	Yes
Network	You can install Forms and Reports Services on a computer that is connected to a network, or on a "standalone" computer (not connected to the network). If you are installing Forms and Reports Services on a standalone computer, you can connect the computer to a network after installation. You have to perform some configuration tasks when you connect it to the network; see the *Oracle Application Server 10g (9.0.4) Administrator's Guide* for details.	No
IP	You can install Forms and Reports Services on a computer that uses static IP or DHCP-based IP.	No
Processor	300 MHz Intel Pentium processor	Yes
Memory	The memory requirements provided for the various installation types represents enough physical memory to install and run Forms and Reports Services. However, for most production sites, you should configure at least 1 GB of physical memory. For sites with substantial traffic, increasing the amount of memory further may improve your performance. For Java applications, you should either increase the maximum heap allocated to the OC4J processes, or configure additional OC4J processes to utilize this memory. See the *Oracle Application Server 10g Performance Guide* for details. In determining the optimal amount of memory for your installation, the best practice is to load test your site. Resource requirements can vary substantially for different applications and different usage patterns. In addition, some operating system utilities for monitoring memory can overstate memory usage (partially due to the representation of shared memory). The preferred method for determining memory requirements is to monitor the improvement in performance resulting from the addition of physical memory in your load test. Refer to your platform vendor documentation for information on how to configure memory and processor resources for testing purposes. Forms and Reports Services: 1GB If you do not meet the memory requirements, the installer displays a warning. The installer allows you to dismiss the warning and continue because you might configure some but not all components and thus require less memory. However, you should test your site to ensure that you do have sufficient memory.	Yes
Disk space	800 MB	No
Space in TEMP directory	55 MB	Yes

Table 5–1 (Cont.) System Requirements

Item	Requirement	Checked by Installer
Total Pagefile size (Virtual Memory)	1.5 GB To view and change the total pagefile size (virtual memory): **Windows NT:** 1. Select **Start > Settings > Control Panel**. 2. Double-click **System**. 3. Select the **Performance** tab. 4. Click **Change** to view and change the virtual memory setting. **Windows 2000:** 1. Select **Start > Settings > Control Panel > System**. 2. Select the **Advanced** tab. 3. Click **Performance Options**. 4. Click **Change** to review and change the virtual memory setting.	Yes
Monitor	256 color display	Yes
Supported browsers	The following browsers are supported: ■ Microsoft Internet Explorer 5.5, 6.0 and higher ■ Netscape 4.78, 4.79, 7 and higher ■ Mozilla 1.3.1 and higher However, Oracle Enterprise Manager is optimized for the following browsers: ■ Microsoft Internet Explorer 5.5, 6.0 and higher ■ Netscape 7 and higher ■ Mozilla 1.3.1 and higher For the most current list of supported browsers, check the Oracle*MetaLink* site (http://metalink.oracle.com). Forms applications require a JVM running within a browser. The following browsers are currently supported: ■ Microsoft Internet Explorer 6.0 and higher with native JVM or JInitiator 1.3.1.13 and higher ■ Netscape 4.7x, 7.0x and higher with JInitiator 1.3.1.13 and higher or Sun Java Plugin 1.4.1 and higher More browsers and JVMs will be certified over time. For the latest information on which browsers and JVMs are certified for Forms, check OTN: (http://otn.oracle.com/products/forms/htdocs/10g/clientsod_forms10g.html)	No

5.1.1 Tips for Reducing Memory Usage

If you need to reduce memory consumption:

■ After installation, if you want to stop services that are not used to reduce the memory usage, you can stop them from the Oracle Enterprise Manager. For details, see the *Oracle Application Server 10g (9.0.4) Administrator's Guide*.

■ For Oracle Report Services, you can control the JVM heap size by specifying small value through the environment variable REPORTS_JVM_OPTIONS. For details, see *Oracle Application Server Reports Services Publishing Reports to the Web*.

5.2 Windows System Files (wsf.exe)

> **Note:** This procedure is applicable only if you are running on Windows NT.

Run wsf.exe to ensure that you have the latest Windows system files. When you run the installer to install Forms and Reports Services, the installer checks these files. If it finds that these files are not up-to-date, you have to exit the installer to run wsf.exe.

wsf.exe is available on Forms and Reports Services Disk 1 CD-ROM or on the DVD.

To run wsf.exe:

1. If you have any open or unsaved documents from other applications, save and close them. This is important because **wsf.exe will reboot the computer automatically** when it is complete.

2. Start wsf.exe, which starts up Oracle Universal Installer to install the Windows system files.

CD-ROM	DVD
1. Insert Disk 1 in the CD-ROM drive.	1. Insert the Forms and Reports Services DVD in the DVD-ROM drive.

2. Start wsf.exe. The following example assumes E: is the CD-ROM drive.
 	
 `E:\> wsf.exe`
	2. Start wsf.exe. The following example assumes E: is the DVD-ROM drive.
	
	 `E:\> cd orawinfrs`
	 `E:\orawinfrs> wsf.exe`

3. If the installer does not detect any Oracle products installed on the computer, it displays the Welcome and the Specify File Locations screens. If it detects existing Oracle products installed on the computer, it skips these screens (go to step 4).

   a. On the Welcome screen, click **Next**.

   b. On the Specify File Locations screen, enter the following information:

   Destination Name: Enter a name for the Oracle home for wsf.

   Destination Path: Enter any full path. The installer installs the files in the proper system directories, regardless of the value you enter in this field.

   Click **Next**.

4. On the Warning: System Reboot Required screen, click **Next** to install the Windows system files.

   When it finishes, it reboots the computer if necessary. It does not display the Installation Finished screen.

Reinstalling Windows System Files

If you need to reinstall the Windows system files for any reason (for example, if the files got corrupted), you need to start up wsf.exe with the -showFileLocationsScreen option. This forces the installer to display the Welcome and the Specify File Locations screens.

If you do not specify the option, the installer thinks that the Windows system files are already installed. It does not display the screens and does not reinstall the files.

To reinstall Windows system files:

1. Start up `wsf.exe` with the `-showFileLocationsScreen` option:

    ```
    E:\> wsf.exe -showFileLocationsScreen
    ```

2. On the Welcome screen, click **Next**.

3. On the Specify File Locations screen, enter the following information:

    Destination Name: Enter a name for the Oracle home for wsf. Specify a name different from the names of other Oracle homes on the computer.

    Destination Path: Enter a full path. The installer installs the files in the proper system directories, regardless of the value you enter in this field.

    Click **Next**.

4. On the Warning: System Reboot Required screen, click **Next** to reinstall the Windows system files.

    When it finishes, it reboots the computer. It does not display the Installation Finished screen.

5.3 Operating System User

The operating system user performing the installation must belong to the Administrators group. Perform the following steps to check if you belong to the Administrators group:

Table 5–2   Checking if a User Belongs to the Administrators Group

Windows NT	Windows 2000 / Windows 2003 / Windows XP
1. Select **Start / Programs / Administrative Tools / User Manager**. This displays the User Manager dialog.	1. Display the Computer Management dialog. Windows 2000 / Windows XP: Right-click **My Computer** on the desktop and select **Manage**.
2. Select the user.	
3. Select **User > Properties**. This displays the User Properties dialog.	Windows 2003: Right-click the local computer icon on the desktop and select **Manage**.
4. In the User Properties dialog, click the **Groups** icon. This displays the Group Memberships dialog.	2. On the left side, expand **Local Users and Groups**, and select **Users**.
	3. On the right side, right-click the user and select **Properties**. This displays the Properties dialog.
	4. In the Properties dialog, select the **Member Of** tab.

If you are not a member of the Administrators group, get an administrator to add you to the group or log in as a user who is a member of the Administrators group.

5.4 Environment Variables

The operating system user who will be installing Oracle Application Server 10*g* (9.0.4) Forms and Reports Services needs to set (or unset) the following environment variables.

Table 5–3 summarizes whether you set or unset an environment variable.

Table 5–3   Environment Variable Summary

Environment variable	Set or Unset
ORACLE_HOME and ORACLE_SID	Does not matter (the installer unsets these two environment variables).
PATH and CLASSPATH	Must not contain references to directories in any Oracle home directories
TEMP	Optional. If unset, defaults to `C:\temp`.

5.4.1 How to Set Environment Variables

This section describes how to set environment variables in Windows:

Table 5–4   How to Set Environment Variables

Windows NT	Windows 2000 / Windows 2003 / Windows XP
1. Select **Start / Settings / Control Panel**.	1. Display the System control panel.
2. Double-click the **System** icon.	Windows 2000: Select **Start / Settings / Control Panel / System**.
3. Select the **Environment** tab.	Windows 2003: Select **Start / Control Panel / System**.
4. To change the value of a variable, select the variable and edit its value in the **Value** field. Click **Set** when you are done.	Windows XP: Select **Start / Control Panel**, then double-click **System**.
	2. Select the **Advanced** tab.
	3. Click **Environment Variables**.
	4. To change the value of a variable, select the variable and click **Edit**.

5.4.2 ORACLE_HOME and ORACLE_SID

It does not matter if these environment variables are set or unset when you start up the installer because the installer unsets these environment variables.

5.4.3 PATH and CLASSPATH

Edit your PATH and CLASSPATH environment variables so that they do not reference any Oracle home directories.

5.4.4 TEMP

During installation, the installer needs to write temporary files to a "temporary" directory. By default, the "temporary" directory is `C:\temp`.

If you want the installer to use a directory other than `C:\temp`, set the TEMP environment variable to the full path of an alternate directory. This directory must meet the requirements listed in Table 5–1.

5.5 Network Topics

Typically, the computer on which you want to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services is connected to the network, has local storage to contain the Forms and Reports Services installation, has a display monitor, and has a CD-ROM or DVD-ROM drive.

This section describes how to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on computers that do not meet the typical scenario. It covers the following cases:

- Section 5.5.1, "Installing on DHCP Computers"

- Section 5.5.2, "Installing on Multi-Homed Computers"

- Section 5.5.3, "Installing on Computers With Multiple Aliases"

- Section 5.5.4, "Installing on Non-Networked Computers"

- Section 5.5.5, "Installing a Loopback Adapter"

- Section 5.5.6, "Copying CD-ROMs or DVD to Hard Drive, and Installing from the Hard Drive"

- Section 5.5.7, "Installing from a Remote CD-ROM or DVD Drive"

- Section 5.5.8, "Installing on Remote Computers Through Remote Control Software"

5.5.1 Installing on DHCP Computers

Note this limitation when running Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on DHCP computers: Forms and Reports Services instances on DHCP computers cannot communicate with other instances running on other computers. All the instances that need to communicate with each other need to run on the same computer. There are no limitations on clients; clients from other computers can access the instances running on the DHCP computer, as long as the client computer can resolve the DHCP computer on the network.

Before installing Forms and Reports Services on a DHCP computer, perform these steps:

1. Install a loopback adapter on the DHCP computer.

   When you install a loopback adapter, the loopback adapter assigns a local IP for your computer. Having a loopback adapter and a local IP address means that you do not have to run the chgiphost script after installation each time the IP address changes (due to DHCP).

   Which Is the Primary Network Adapter?

   Windows considers loopback adapters as a type of network adapter. After installing a loopback adapter on your computer, you have at least two network adapters on your computer: your network adapter and the loopback adapter.

   You want Windows to use the loopback adapter as the primary adapter. The primary adapter is determined by the order in which you installed the adapters:

   - On Windows NT, the primary adapter is the *first* adapter installed. This means that you have to install the loopback adapter, deinstall your network adapter, and reinstall the network adapter.

   - On Windows 2000, the primary adapter is the *last* adapter installed. You can just install the loopback adapter. However, if you install additional network adapters after you install the loopback adapter, you need to deinstall the loopback adapter and reinstall it.

   To install a loopback adapter on the different Windows platforms, see Section 5.5.5, "Installing a Loopback Adapter".

2. Ping each computer where you plan to install Forms and Reports Services.

- Ping the computer from itself, using only the hostname and using the fully qualified name.

  For example, if you installed a loopback adapter on a computer called `mycomputer`, check the following:

  ```
  prompt> ping mycomputer              Ping itself using just the hostname.
  Reply from 10.10.10.10                   Returns local IP.
  prompt> ping mycomputer.mydomain.com  Ping using a fully qualified name.
  Reply from 10.10.10.10                   Returns local IP.
  ```

  > **Note:** When you ping a computer from itself, the `ping` command should return the local IP (the IP of the loopback adapter). It should not return the network IP of the computer.

- Ping the computer from other computers on the network, using only the hostname and using the fully qualified name.

  In this case, the `ping` command returns the network IP of the computer.

  ```
  prompt> ping mycomputer              Ping using the hostname.
  Reply from 139.185.140.166               Returns network IP.
  prompt> ping mycomputer.mydomain.com  Ping using a fully qualified name.
  Reply from 139.185.140.166               Returns network IP.
  ```

If `ping` fails, then you need to have a talk with your network administrator.

5.5.2 Installing on Multi-Homed Computers

A multi-homed computer is associated with multiple IP addresses. This is typically achieved by multiple network cards on the computer. Each IP address is associated with a hostname; additionally you can set up aliases for the hostname.

When you install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on a multi-homed computer, the installer configures Forms and Reports Services to use the hostname/IP address on the primary network adapter.

Clients must be able to access the computer using this hostname (or using aliases for this hostname). To check, ping the hostname from the client computers using the short name (hostname only) and the full name (hostname.domainname). Both must work.

You can determine the primary hostname and IP address by running the `hostname` and `ipconfig` commands. For example:

```
prompt> hostname
test-pc2

prompt> ipconfig
Windows 2000 IP Configuration
Ethernet adapter Local Area Connection:
    Connection-specific DNS Suffix  . :
    IP Address. . . . . . . . . . . : 139.185.140.166
    Subnet Mask . . . . . . . . . . : 255.255.255.0
    Default Gateway . . . . . . . . : 139.185.140.1
```

If the primary adapter is not the one you want to use for Forms and Reports Services, you have these choices:

■ Make the network adapter that you want to use for Forms and Reports Services to be the primary network adapter.

■ Make no changes to the network adapters, but run the `chgiphost` script after installation.

How Windows determines the primary network adapter is described in "Which Is the Primary Network Adapter?" on page 5-7.

5.5.3 Installing on Computers With Multiple Aliases

A computer with multiple aliases refers to a computer registered with the naming service under a single IP but with multiple aliases. The naming service resolves any of those aliases to the same computer.

Before installing Forms and Reports Services on such computers, you must:

■ install a loopback adapter on the computer

■ make sure the loopback adapter is the primary network adapter

The loopback adapter ensures that when Forms and Reports Services queries for the hostname, it always gets the same name (because the queries are done locally). Without the loopback adapter, the queries can return any of the aliases for the computer (because the queries get the response from the naming service).

To learn how Windows determines which adapter is the primary adapter, see "Which Is the Primary Network Adapter?" on page 5-7.

For steps on how to install a loopback adapter, see Section 5.5.5, "Installing a Loopback Adapter".

5.5.4 Installing on Non-Networked Computers

You can install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on a non-networked computer, such as a laptop. Because a non-networked computer has no access to other computers, you have to install all the components that you need on the computer.

If you want to install Forms and Reports Services on a non-networked computer, and you never want to connect the computer to a network after installation, ever, then you can just go ahead and install Forms and Reports Services on your non-networked computer.

However, if you plan to connect the computer to a network after installation, perform these steps before you install Forms and Reports Services on the non-networked computer.

1. Install a loopback adapter on the computer. See Section 5.5.5, "Installing a Loopback Adapter".

   The loopback adapter and local IP address simulate a networked computer. If you connect the computer to the network, Forms and Reports Services still uses the local IP and hostname.

2. Ping the computer from itself, using only the hostname and using the fully qualified name.

   For example, if you installed a loopback adapter on a computer called `mycomputer`, check the following:

```
prompt> ping mycomputer              Ping itself using just the hostname.
Reply from 10.10.10.10                 Returns local IP.
```

```
prompt> ping mycomputer.mydomain.com    Ping using a fully qualified name.
Reply from 10.10.10.10                       Returns local IP.
```

> **Note:**   When you ping a computer from itself, the `ping` command should return the local IP (the IP of the loopback adapter).

If `ping` fails, then you need to talk with your network administrator.

Connecting the Computer to the Network After Installation

If you connect the computer to a network after installation, your Forms and Reports Services instance on your computer can work with other instances on the network. Recall that you must have installed a loopback adapter on your computer. Your computer can use a static IP or DHCP, depending on the network to which you are connected.

See the *Oracle Application Server 10g (9.0.4) Administrator's Guide* for details.

5.5.5 Installing a Loopback Adapter

A loopback adapter is required if:

- you are installing on a DHCP computer (see Section 5.5.1, "Installing on DHCP Computers"), or

- you are installing on a non-networked computer and plan to connect the computer to a network after installation (see Section 5.5.4, "Installing on Non-Networked Computers").

The procedure for installing a loopback adapter depends on the version of Windows:

- Section 5.5.5.1, "Checking If a Loopback Adapter Is Installed on Your Computer"

- Section 5.5.5.2, "Installing a Loopback Adapter - Windows NT"

- Section 5.5.5.3, "Installing a Loopback Adapter - Windows 2000"

- Section 5.5.5.4, "Installing a Loopback Adapter - Windows 2003 / Windows XP"

- Section 5.5.5.5, "Removing the Loopback Adapter - Windows NT"

- Section 5.5.5.6, "Removing a Loopback Adapter - Windows 2000 / Windows 2003 / Windows XP"

5.5.5.1 Checking If a Loopback Adapter Is Installed on Your Computer

To check if a loopback adapter is installed on your computer, run the "`ipconfig /all`" command:

```
prompt> ipconfig /all
```

If there is a loopback adapter installed, you would see a section that lists the values for the loopback adapter. For example:

```
Ethernet adapter Local Area Connection 2:
  Connection-specific DNS Suffix  . :
  Description . . . . . . . . . . . : Microsoft Loopback Adapter
  Physical Address. . . . . . . . . : 02-00-4C-4F-4F-50
  DHCP Enabled. . . . . . . . . . . : Yes
  Autoconfiguration Enabled . . . . : Yes
  Autoconfiguration IP Address. . . : 169.254.25.129
```

```
Subnet Mask . . . . . . . . . . . : 255.255.0.0
```

5.5.5.2 Installing a Loopback Adapter - Windows NT

Installing a loopback adapter on Windows NT is more complicated than on other Windows platforms because Windows NT reports on the *first* network adapter installed. Since your DHCP computer already has a network adapter, you need to remove it and reinstall it later so that the loopback adapter becomes the first network adapter installed. This section describes how to do this in these subsections:

- "High-Level Steps" on page 5-11
- "Requirements" on page 5-11
- "Detailed Steps" on page 5-11

High-Level Steps

The high-level steps to install a loopback adapter on Windows NT are:

1. Collect information for the existing network adapter on your computer. This step is needed because you need to remove the existing network adapter and reinstall it.

2. Install the loopback adapter.

3. Remove the existing network adapter.

4. Finish configuring the loopback adapter.

5. Reboot the computer.

6. Reinstall the network adapter.

7. Reboot the computer.

Requirements

To install a loopback adapter on Windows NT, you need the following items:

- Windows NT Installation CD-ROM—This is required to install the loopback adapter.

- Drivers for your network adapters—You need the drivers when you reinstall the network adapters.

Detailed Steps

1. Collect information for your existing network adapter so that you can reinstall it. Typically you need the following pieces of information:

Table 5–5   Information for Your Existing Network Adapter

| Item	Where to Get Its Value
IP address	Network control panel, **Adapter** tab. Choose network adapter, then click **Properties**.
Subnet mask	Network control panel, **Protocols** tab. Choose **TCP/IP**, then click **Properties**. In the Properties dialog, choose the **IP Address** tab and click **Advanced**.
WINS Server address	Network control panel, **Protocols** tab. Choose **TCP/IP**, then click **Properties**. In the Properties dialog, choose the **WINS Address** tab.

Table 5–5   (Cont.) Information for Your Existing Network Adapter

Item	Where to Get Its Value
DNS Server address	Network control panel, **Protocols** tab. Choose **TCP/IP**, then click **Properties**. In the Properties dialog, choose the **DNS** tab.

2. Insert the Windows NT Installation CD-ROM in the CD-ROM drive.

3. Right-click **Network Neighborhood** on the desktop, and choose **Properties**. This displays the Network control panel.

4. Choose the **Adapters** tab.

5. Click **Add**.

6. Choose **MS Loopback Adapter** and click **OK**.

7. In the MS Loopback Adapter Card Setup dialog, click **OK** to accept the default frame type (the default value is 802.3).

8. Enter the location of your Windows NT CD-ROM (for example, E:\i386) and click **Continue**.

When the loopback adapter is installed, Windows NT displays the Network control panel showing all the network adapters (Figure 5–1).

Figure 5–1   Network Control Panel Showing the Loopback Adapter
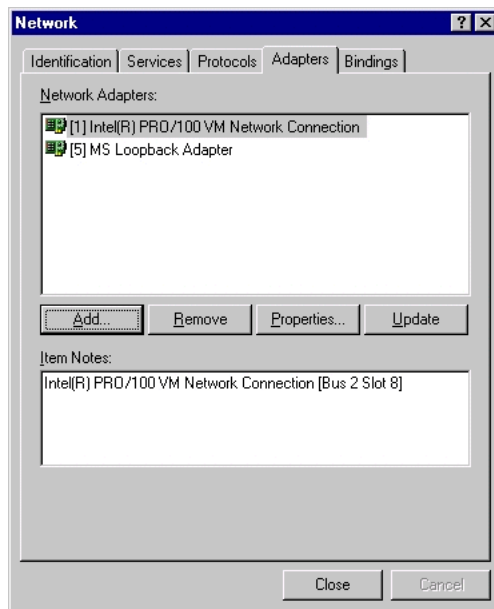
9. In the Network control panel, delete the network adapters that were installed before the loopback adapter. Select the network adapter and click **Remove**.

You need to do this because you want the loopback adapter to be the first network adapter. In the example, you would delete the Intel network adapter. You will reinstall it later.

10. Click **Close** in the Network control panel. This displays the Microsoft TCP/IP Properties dialog (Figure 5–2).

11. In the Microsoft TCP/IP Properties dialog, select **MS Loopback Adapter**, and enter the following information:

IP Address: Enter a non-routable IP for the loopback adapter. The following non-routable addresses are recommended:
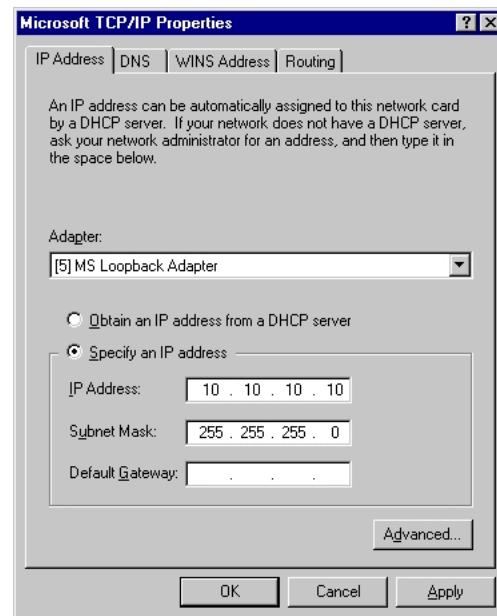
192.168.*x*.*x* (*x* is any value between 1 and 255)

10.10.10.10

Subnet Mask: Enter `255.255.255.0`.

Click **OK**.

Figure 5–2   TCP/IP Properties Dialog Showing Values for the Loopback Adapter

12. Reboot your computer.

13. When the computer comes back up, reinstall your real network adapter.

14. Reboot the computer again.

### 5.5.5.3 Installing a Loopback Adapter - Windows 2000

Windows 2000 reports on the *last* network adapter installed. This means that if you install additional network adapters after you install the loopback adapter, you need to remove and reinstall the loopback adapter. The loopback adapter must be the last network adapter installed on the computer.

To install a loopback adapter on Windows 2000:

1. Select **Start / Settings / Control Panel**.

2. Double-click **Add/Remove Hardware**. This starts up the Add/Remove Hardware wizard.

3. "Welcome page": Click **Next**.

4. "Choose a Hardware Task" page: Select **Add/Troubleshoot a device**, and click **Next**.

5. "Choose a Hardware Device" page: Select **Add a new device**, and click **Next**.

6. "Find New Hardware" page: Select **No, I want to select the hardware from a list**, and click **Next**.

7. "Hardware Type" page: Select **Network adapters**, and click **Next**.

8. "Select Network Adapter" page

   Manufacturers: select **Microsoft**.

   Network Adapter: select **Microsoft Loopback Adapter**.

   Click **Next**.

9. "Start Hardware Installation" page: Click **Next**.

10. "Completing the Add/Remove Hardware Wizard" page: Click **Finish**.

11. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network and Dial-up Connections control panel.

12. Right-click the connection that was just created. This is usually "Local Area Connection 2". Choose **Properties**.

13. On the **General** tab, select **Internet Protocol (TCP/IP)**, and click **Properties**.

14. In the Properties dialog (Figure 5–3), enter the following values:

    IP Address: Enter a non-routable IP for the loopback adapter. The following non-routable addresses are recommended:

    192.168.*x.x* (*x* is any value between 1 and 255)

    10.10.10.10

    Subnet mask: Enter 255.255.255.0.

    Leave all other fields empty.

    Click **OK**.

Figure 5–3   Internet Protocol (TCP/IP) Properties Dialog Showing Values for the Loopback Adapter
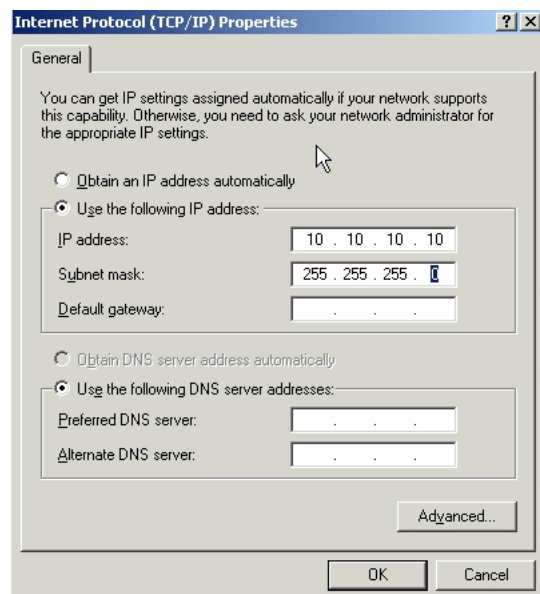
15. Click **OK** in the Local Area Connection 2 Properties dialog.

16. Reboot the computer.

17. Add a line to the `C:\winnt\system32\drivers\etc\hosts` file with the following format:

```
IP_address    hostname.domainname    hostname
```

This line should come after the `localhost` line in the file.

Replace *IP_address* with the non-routable IP address you entered in step 14.

Replace *hostname* and *domainname* with the appropriate values.

Example:

```
10.10.10.10   mycomputer.mydomain.com   mycomputer
```

18. Check the network configuration:

a. Open the System control panel, and select the **Network Identification** tab. In **Full computer name**, make sure you see the hostname and the domain name (Figure 5–4).

Figure 5–4   System Control Panel, Network Identification Tab
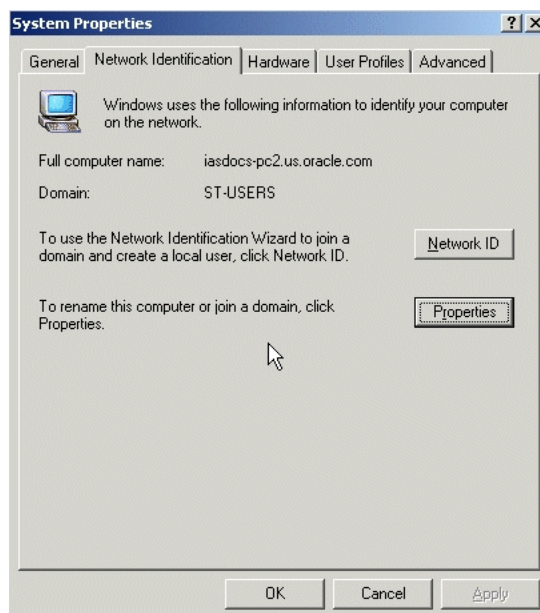
b. Click **Properties**. In **Computer name**, you should see the hostname, and in **Full computer name**, you should see the hostname and domain name (Figure 5–5).

Figure 5–5 Identification Changes Dialog
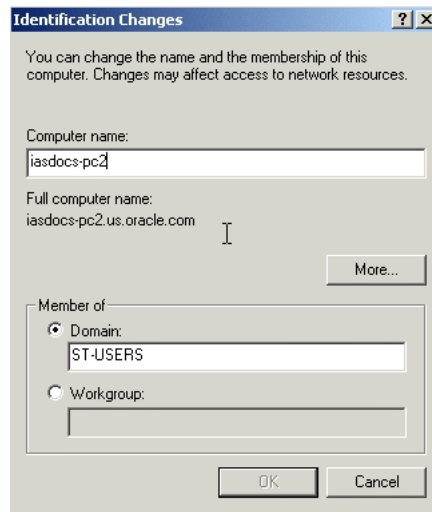
c. Click **More**. In **Primary DNS suffix of this computer**, you should see the domain name (Figure 5–6).

Figure 5–6 DNS Suffix and NetBIOS Computer Name Dialog
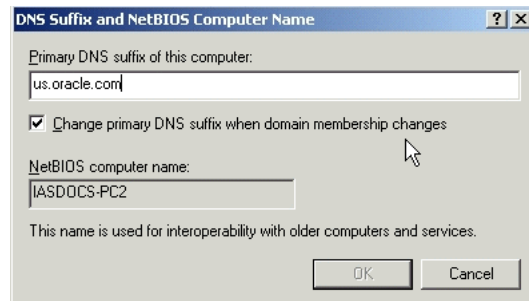
5.5.5.4 Installing a Loopback Adapter - Windows 2003 / Windows XP

To install a loopback adapter on Windows 2003 or Windows XP:

1. Select **Start / Control Panel**.

2. Double-click **Add Hardware**. This starts up the Add Hardware wizard.

3. "Welcome" page: Click **Next**.

4. "Is the hardware connected?" page: Select **Yes, I have already connected the hardware**, and click **Next**.

5. "The following hardware is already installed on your computer" page: Select **Add a new hardware device**, and click **Next**.

6. "The wizard can help you install other hardware" page: Select **Install the hardware that I manually select from a list**, and click **Next**.

7. "From the list below, select the type of hardware you are installing" page: Select **Network adapters**, and click **Next**.

8. "Select Network Adapter" page

Manufacturer: select **Microsoft**.

Network Adapter: select **Microsoft Loopback Adapter**.

Click **Next**.

9. "The wizard is ready to install your hardware": Click **Next**.

10. "Completing the Add Hardware Wizard" page: Click **Finish**.

11. (Windows 2003) Reboot your computer.

12. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections control panel.

13. Right-click the connection that was just created. This is usually "Local Area Connection 2". Choose **Properties**.

14. On the **General** tab, select **Internet Protocol (TCP/IP)**, and click **Properties**.

15. In the Properties dialog (Figure 5–3), enter the following values:

IP Address: Enter a non-routable IP for the loopback adapter. The following non-routable addresses are recommended:

192.168.*x.x* (*x* is any value between 1 and 255)

10.10.10.10

Subnet mask: Enter `255.255.255.0`.

Leave all other fields empty.

Click **OK**.

16. Click **OK** in the Local Area Connection 2 Properties dialog.

17. Reboot the computer.

18. Add a line to the `C:\windows\system32\drivers\etc\hosts` file with the following format:

```
IP_address    hostname.domainname    hostname
```

This line should come after the `localhost` line in the file.

Replace *IP_address* with the non-routable IP address you entered in step 15.

Replace *hostname* and *domainname* with the appropriate values.

Example:

```
10.10.10.10   mycomputer.mydomain.com   mycomputer
```

19. Check the network configuration:

   a. Open the System control panel, and select the **Computer Name** tab. In **Full computer name**, make sure you see the hostname and the domain name.

   b. Click **Change**. In **Computer name**, you should see the hostname, and in **Full computer name**, you should see the hostname and domain name (Figure 5–5).

   c. Click **More**. In **Primary DNS suffix of this computer**, you should see the domain name (Figure 5–6).

5.5.5.5 Removing the Loopback Adapter - Windows NT

To remove the loopback adapter on Windows NT:

1. Select **Start / Settings / Control Panel**.

2. Double-click **Network**.

3. Select the **Adapters** tab.

4. Select **MS Loopback Adapter** and click **Remove**.

5. Reboot your computer.

5.5.5.6 Removing a Loopback Adapter - Windows 2000 / Windows 2003 / Windows XP

To remove the loopback adapter on Windows 2000 or Windows XP:

1. Display the System control panel.

   Windows 2000: Select **Start / Settings / Control Panel**, then double-click **System**.

   Windows 2003: Select **Start / Control Panel / System**.

   Windows XP: Select **Start / Control Panel**, then double-click **System**.

2. In the Hardware tab, click **Device Manager**.

3. In the Device Manager windows, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.

4. Right-click **Microsoft Loopback Adapter** and select **Uninstall**.

5.5.6 Copying CD-ROMs or DVD to Hard Drive, and Installing from the Hard Drive

Instead of installing from the Oracle Application Server 10*g* (9.0.4) Forms and Reports Services CD-ROMs or DVD, you can copy the contents of the CD-ROMs or DVD to a hard drive and install from there. This might be easier if you plan to install many instances of Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on your network, or if the computers where you want to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services do not have CD-ROM or DVD drives.

(You can install from remote CD-ROM or DVD drives; see Section 5.5.7, "Installing from a Remote CD-ROM or DVD Drive".)

Accessing the Hard Drive from Other Computers

If you want to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on remote computers from the hard drive where you copied the contents of the CD-ROM or DVD, you have to do the following steps:

1. On the local computer, share the hard drive.

2. On the computers where you want to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services, map to the shared hard drive.

3. Run the installer from the remote computers where you want to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services.

   Note that you have to use the drive letter for the mapped drive to access the installer (for example, H:\orawinfrs\setup.exe).

   You cannot use the universal naming convention (UNC) syntax (\\hostname\sharename) to access the installer.

When you install from the hard drive, the installer does not prompt you to swap CD-ROMs. It can find all the files if they are in the proper locations.

To copy the CD-ROM:

1. Create a directory structure on your hard disk.

   You need to create a parent directory (For example, `orawinfrs` but you can name it anything you like), and, under the parent directory, create subdirectory called `Disk1`. The name of the subdirectory must be `DiskN`, where *N* is the CD-ROM number.

2. Copy the contents of the CD-ROM into the corresponding directory.

   You can copy the files using Windows Explorer or the command line. If you are using the command line, you can use the `xcopy` command.

   The following example assumes E: is the CD-ROM drive, and `C:\orawinfrs\DiskN` is the directory that you want to copy the CD-ROMs to.

   ```
   E:\> xcopy /e /i  E:\904disk1  C:\orawinfrs\Disk1
   ```

To run the installer from the copied files, invoke the `setup.exe` executable from the `Disk1` directory. Run it from the computer that will be running Oracle Application Server 10*g* (9.0.4) Forms and Reports Services.

```
C:\> cd orawinfrs\Disk1
C:\orawinfrs\Disk1> setup.exe
```

To copy the orawinfrs Directory from the DVD

You can copy the `orawinfrs` directory using Windows Explorer or the command line. If you are using the command line, here are the steps:

1. (optional) Create a directory to contain the `orawinfrs` directory.

2. Copy the `orawinfrs` directory from the DVD to your hard disk.

   The example assumes E: is the DVD-ROM drive, and `C:\orawinfrs` is the destination directory:

   ```
   E:\> xcopy /e /i  E:\orawinfrs  C:\orawinfrs
   ```

To run the installer from the copied files, invoke the `setup.exe` executable from the computer that will be running Oracle Application Server 10*g* (9.0.4) Forms and Reports Services:

```
C:\> cd orawinfrs
C:\orawinfrs> setup.exe
```

5.5.7 Installing from a Remote CD-ROM or DVD Drive

If the computer where you want to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services does not have a CD-ROM or DVD drive, you can perform the installation from a remote CD-ROM or DVD drive. Check the following points:

On the Remote Computer, Share the CD-ROM or DVD Drive

The remote CD-ROM or DVD drive that you want to use must allow shared access. To set this up, perform these steps on the remote computer (which has the CD-ROM or DVD drive):

1. Log in to the remote computer as an Administrator user.

2. Start up Windows Explorer.

3. Right-click the CD-ROM or DVD drive letter and choose **Sharing** (Windows 2000, Windows NT) or **Sharing and Security** (Windows 2003, Windows XP).

4. In the **Sharing** tab (Figure 5–7):

   Select **Share this folder**.

   Share name: Give it a share name such as cdrom or dvd. You will use this name when you map the CD-ROM or DVD drive on the local computer. See step d on page 5-20.

   Click **Permissions**. You need at least "read" permission for the user who will be accessing it to install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services.

   Click **OK** when done.

Figure 5–7   Sharing a CD-ROM Drive
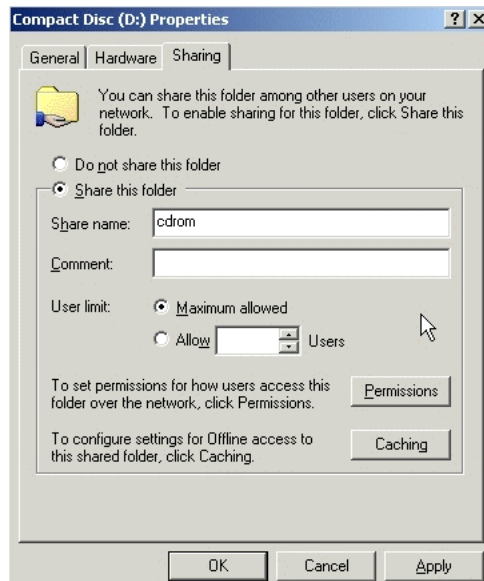
5. CD-ROM: Insert Oracle Application Server 10*g* (9.0.4) Forms and Reports Services Disk 1 into the CD-ROM drive.

   DVD: Insert the Oracle Application Server 10*g* (9.0.4) Forms and Reports Services DVD into the DVD drive.

On the Local Computer, Map the CD-ROM or DVD Drive

Perform these steps on the local computer to map the CD-ROM or DVD drive and to run the installer:

1. Map the remote CD-ROM or DVD drive.

   a. Start up Windows Explorer on the local computer.

   b. Select **Tools > Map Network Drive**. This displays the Map Network Drive dialog.

   c. Select a drive letter to use for the remote CD-ROM or DVD drive.

   d. In **Folder**, enter the location of the remote CD-ROM or DVD drive using the following format:

```
\\remote_hostname\share_name
```

Replace *remote_hostname* with the name of the remote computer with the CD-ROM or DVD drive.

Replace *share_name* with the share name that you entered in step 4 on page 5-20.

Example: `\\computer2\cdrom`

e. If you need to connect to the remote computer as a different user:

Windows NT: Enter the username in **Connect As**.

Windows 2000, Windows 2003, Windows XP: Click **different user name**, and enter the username.

f. Click **OK** (Windows NT) or **Finish** (Windows 2000, Windows 2003, Windows XP).

2. Run the installer from the mapped CD-ROM or DVD drive.

When the installer prompts you to switch CD-ROMs, eject the CD-ROM and insert the requested CD-ROM.

> **Note:** The installer must be running when you are switching CD-ROMs. Do **not** exit the installer when switching CD-ROMs. If you exit the installer, it is unable to continue from where it left off. In addition, the partial installation that it created is not usable, and may need to be removed manually.

5.5.8 Installing on Remote Computers Through Remote Control Software

If you want to install and run Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on a remote computer (that is, the remote computer has the hard drive and will run Forms and Reports Services components), but you do not have physical access to the computer, you can still perform the installation on the remote computer if it is running remote control software such as VNC or Symantec pcAnywhere. You also need the remote control software running on your local computer.

You can install Oracle Application Server 10*g* (9.0.4) Forms and Reports Services on the remote computer in one of two ways:

- If you have copied the contents of the Oracle Application Server 10*g* (9.0.4) Forms and Reports Services CD-ROM or DVD to a hard drive, you can install from the hard drive.

- You can insert the CD-ROM or DVD into a drive on your local computer, and install from the CD-ROM or DVD.

Installing from a Hard Drive

If you have copied the contents of the Oracle Application Server 10*g* (9.0.4) Forms and Reports Services CD-ROM or DVD to a hard drive, you can install from the hard drive.

The steps that you have to do are:

1. Make sure that the remote control software is installed and running on the remote and local computers.

2. Share the hard drive that contains the Oracle Application Server 10*g* (9.0.4) Forms and Reports Services CD-ROM or DVD.

3. On the remote computer, map a drive letter to the shared hard drive. You would use the remote control software to do this on the remote computer.

4. Through the remote control software, run the installer on the remote computer. You access the installer from the shared hard drive.

Installing from a Remote CD-ROM or DVD Drive

You can insert the CD-ROM or DVD into a drive on your local computer, and install from the CD-ROM or DVD. This is similar to the scenario described in Section 5.5.7, "Installing from a Remote CD-ROM or DVD Drive".

The steps that you have to do are:

1. Make sure that the remote control software is installed and running on the remote and local computers.

2. On the local computer, share the CD-ROM or DVD drive.

On the remote computer, map a drive letter to the shared CD-ROM or DVD drive. You would use the remote control software to do this on the remote computer.

These steps are described in Section 5.5.7, "Installing from a Remote CD-ROM or DVD Drive".

3. Through the remote control software, run the installer on the remote computer. You access the installer from the shared CD-ROM or DVD drive.

5.6 Prerequisite Checks Performed by the Installer

Table 5–6 lists the checks performed by the installer:

Table 5–6   Prerequisite Checks Performed by the Installer

Item	Description
User	The installer checks that the user has administrative privileges.
Processor	See Table 5–1 for the processor speed requirements.
Monitor	The installer checks that the monitor is configured to display at least 256 colors.
Operating system version	See Table 5–1 for supported versions.
Windows service pack	See Table 5–1 for supported service packs.
Memory	See Table 5–1 for recommended values.
Total pagefile (virtual memory) size	See Table 5–1 for recommended values.
Space in TEMP directory	See Table 5–1 for recommended values.
Instance name	The installer checks that the computer on which you are installing Forms and Reports Services does not already have an instance of the same name.
Oracle home directory name	The installer checks that the Oracle home directory name does not contain any spaces.
Path to the Oracle home directory	The installer checks that the path to the Oracle home directory is not longer than 127 characters.
Oracle home directory contents	The installer checks that the Oracle home directory does not contain any files that might interfere with the installation.

Table 5–6   (Cont.) Prerequisite Checks Performed by the Installer

Item	Description
Oracle home directory	You should install Forms and Reports Services in a new directory. Here are some examples of installations that are **not allowed**:
	■ Any type of Oracle Application Server into an 8.0, 8*i*, 9.0.1, or 9.2 database Oracle home
	■ Any type of Oracle Application Server into an Oracle Management Service Oracle home
	■ Any type of Oracle Application Server into an Oracle Collaboration Suite Oracle home
	■ Any type of Oracle Application Server into an Oracle HTTP Server standalone Oracle home
	■ Any type of Oracle Application Server into an OracleAS Web Cache standalone Oracle home
	■ Any type of Oracle Application Server into an Oracle9*i* Developer Suite 9.0.2 Oracle home
	■ Any type of Oracle Application Server into an Oracle Application Server Containers for J2EE standalone Oracle home
	■ Any type of Oracle Application Server into an Oracle9*i*AS 1.0.2.2 Oracle home
	■ Oracle Application Server 10*g* (9.0.4) Forms and Reports Services into an infrastructure 9.0.2 or 10*g* (9.0.4) Oracle home
	■ Oracle Application Server 10*g* (9.0.4) Forms and Reports Services into an Oracle9*i*AS 9.0.2 or 9.0.3 middle tier Oracle home
	■ OracleAS Developer Kits 10*g* into an infrastructure 9.0.2 or 10*g* (9.0.4) Oracle home
	■ OracleAS Developer Kits 10*g* into an Oracle9*i*AS middle tier 9.0.2 or 9.0.3 Oracle home
	■ OracleAS Developer Kits 10*g* into an Oracle Developer Suite 9.0.2 or 10*g* (9.0.4) Oracle home
	■ OracleAS Infrastructure 10*g* into any Oracle9*i*AS 9.0.2 Oracle home
	■ OracleAS Infrastructure 10*g* into an Oracle Application Server 10*g* (9.0.4) Forms and Reports Services or OracleAS Developer Kits 10*g* Oracle home
	■ OracleAS Infrastructure 10*g* into an Oracle Developer Suite 9.0.2 or 10*g* (9.0.4) Oracle home
Static port conflicts	The installer checks the ports listed in the `staticports.ini` file, if specified. See Section 3.1, "Ports".
Oracle Enterprise Manager directories are writable	The installer runs this check only if you are expanding a middle tier or if you are reinstalling Forms and Reports Services in the same Oracle home. The installer checks that these directories are writable by the operating system user running the installer:
	■ `ORACLE_HOME\sysman\emd`
	■ `ORACLE_HOME\sysman\config`
	■ `ORACLE_HOME\sysman\webapps\emd\WEB-INF\config`
Oracle Enterprise Manager files exist	The installer runs this check only if you are expanding a middle tier or if you are reinstalling Forms and Reports Services in the same Oracle home. The installer checks that these files exist:
	■ `ORACLE_HOME\sysman\config\iasadmin.properties`
	■ `ORACLE_HOME\sysman\webapps\emd\WEB-INF\config\consoleConfig.xml`

6

Things You Should Know Before Starting the Installation

Contents:

6.1 Oracle Home Directory

The directory in which you install Forms and Reports Services is called the Oracle home. During installation, you specify the full path to this directory and a name for this Oracle home.

For example, you can install Forms and Reports Services in `C:\oracle\orawinfrs` and you can name it "frs904".

See Section 6.2, "Oracle Home Name", which describes how the name is used.

6.2 Oracle Home Name

One of the screens in the installer prompts you for the Oracle home directory (which is the destination directory) and also an Oracle home name. This Oracle home name does not need to be the same as the directory name. The Oracle home name can consist of alphanumeric and the underscore (_) characters, and cannot be longer than 128 characters.

The Oracle home name is used in the following ways:

- Some Forms and Reports Services components run as Windows services. When naming these services, the installer inserts the Oracle home name in the service name using the following format:

  `Oracle<OracleHomeName><ComponentName>`

- The installer also uses the Oracle home name in Start menu items.

6.3 Installing Additional Languages

By default, the installer installs Forms and Reports Services with text in English and in the operating system language. If you need to install additional languages, click **Product Languages** on the Available Product Components screen.

Note that you cannot install additional languages after installation. You must install additional languages during installation. If you run Forms and Reports Services in an environment that uses a language that you did not install, the user interface can display text in that language and/or in English, or it can display square boxes (caused by missing fonts) instead of text.

6.4 Oracle Application Server 10*g* (9.0.4) Forms and Reports Services Instances and Instance Names

When you install Forms and Reports Services, what you get is an Forms and Reports Services instance. The installer prompts you to provide a name for the Forms and Reports Services instance you are installing. For example, you can name an instance "frs904" or "J2EE_904". This name can be different from the Oracle home name.

You cannot change this name after installation.

Oracle Application Server 10*g* (9.0.4) Forms and Reports Services appends the hostname and domain name to the given instance name to form a complete instance name. For example, if you are installing an instance on a computer named `c1`, and you name the instance `frs1`, then the full name of the instance is `frs1.c1.mydomain.com`, assuming the domain name is `mydomain.com`.

Valid Characters in Instance Names

Instance names can consist only of the alphanumeric characters (`A-Z`, `a-z`, `0-9`) and the `$` or `_` (underscore) characters.

There is no maximum length restriction for instance names.

How Oracle Application Server 10*g* (9.0.4) Forms and Reports Services Uses Instance Names

Instance names are important because Forms and Reports Services uses them to uniquely identify instances. This means that if you install multiple Forms and Reports Services instances on the same computer (for example, an OracleAS Infrastructure 10*g* and a J2EE and Web Cache instance), you must give them different names.

When you administer Forms and Reports Services using Oracle Enterprise Manager Application Server Control (or Application Server Control for short), the instance name appears on the screens. You can click the instance name to see details about the instance, such as the components that are installed in that instance, if the components are running or stopped, and the log files for the components. The Application Server Control is a browser-based administration tool for Forms and Reports Services. See the *Oracle Application Server 10g Administrator's Guide* for details about this administration tool.

In addition, some `dcmctl` commands require an instance name as a parameter. `dcmctl` is a command-line tool for administering Forms and Reports Services instances. See the *Distributed Configuration Management Reference Guide* for details about `dcmctl`.

6.5 The ias_admin User and Restrictions on its Password

The installer prompts you to specify the password for the ias_admin user. The ias_admin user is the administrative user for Forms and Reports Services instances. To manage Forms and Reports Services instances using Application Server Control, you log in as ias_admin.

On a computer, you can install multiple Forms and Reports Services instances, each with its own unique instance name, but the name of the administrative user is ias_admin for all instances. The password for the ias_admin user can be different for each instance.

In 10*g* (9.0.4), each Forms and Reports Services instance has its own password. Even if you install multiple Forms and Reports Services instances on the same computer using the same operating system user, you have to enter a new password for each instance on the same computer

Password for the ias_admin User

The password for the ias_admin user must conform to the following password policy:

- The minimum length is five alphanumeric characters.

- At least one of the characters must be a number.

The password for the ias_admin user has these restrictions:

- Passwords must be shorter than 30 characters.

- Passwords can contain only alphanumeric characters from your database character set, the underscore (_), the dollar sign ($), and the number sign (#).

- Passwords must begin with an alphabetic character. It cannot begin with a number, the underscore (_), the dollar sign ($), or the number sign (#).

- Passwords cannot be Oracle reserved words. Appendix C in the *Oracle9i SQL Reference* guide lists the reserved words. You can find this guide on Oracle Technology Network (http://otn.oracle.com). Or you can just avoid using words that sound like they might be reserved words.

You must remember the password because you need to enter it to perform the following task:

- When you log on to Application Server Control to manage Forms and Reports Services, you log on as the ias_admin user.

If you forget the password, you can reset it. See the *Oracle Application Server 10g Administrator's Guide* for details.

6.6 Where Does the Installer Write Files?

The installer writes files to the following directories:

Table 6–1   Directories Where the Installer Writes Files

Directory	Description
Oracle home directory	This directory contains Forms and Reports Services files. You specify this directory when you install Forms and Reports Services.

Table 6–1   (Cont.) Directories Where the Installer Writes Files

Directory	Description
Inventory directory (*system_drive*:\Program Files\Oracle\Inventory)	The installer uses the inventory directory to keep track of which Oracle products are installed on the computer. The inventory directory is created when you install the first Oracle product on the computer. In subsequent installations, the installer uses the same inventory directory.
TEMP directory	The installer writes files needed only during installation to a "temporary" directory. The "temporary" directory is specified by the TEMP variable.

Additionally, the installer also creates entries in the Windows registry.

6.7 Starting the Oracle Universal Installer

1. Log in to the computer as a user who is a member of the Windows Administrators group.

2. Insert the disk.

    CD-ROM users: Insert Oracle Application Server 10*g* (9.0.4) Forms and Reports Services Disk 1 into the CD-ROM drive.

    DVD users: Insert the Oracle Application Server 10*g* (9.0.4) Forms and Reports Services DVD into the DVD-ROM drive. The DVD is in DVD-ROM format.

3. If your computer supports the auto run feature, the installer launches automatically.

    If your computer does not support the auto run feature, you have to start up the installer manually:

    CD-ROM users: Double-click the setup.exe file.

    DVD users: Double-click the setup.exe file located in the application_ server directory.

This launches Oracle Universal Installer, through which you can install Forms and Reports Services.

7

Post-Installation Tasks

This chapter describes the post-installation tasks you need to perform to ensure complete installation of Oracle Application Server 10*g* (9.0.4) Forms and Reports Services.

This chapter contains the following sections:

- Section 7.1, "State of Oracle Application Server 10g (9.0.4) Forms and Reports Services Instances After Installation"

- Section 7.2, "Testing the Forms and Reports Services Installation"

- Section 7.3, "Backup and Recovery"

- Section 7.4, "SSL"

- Section 7.5, "NLS_LANG Environment Variable"

- Section 7.6, "Deployment of Forms and Reports Application"

7.1 State of Oracle Application Server 10*g* (9.0.4) Forms and Reports Services Instances After Installation

After installation, the components that you have configured are started up.

You can view the Welcome page and the Application Server Control page in a browser. The URLs for these pages are shown in the last screen of the installer. You can view the contents of the last screen in the file `ORACLE_HOME\install\setupinfo.txt`.

Some of the Forms and Reports Services components run as Windows services. You can see them in the Services dialog. To display the Services dialog:

Windows NT: Select **Start / Settings / Control Panel**, and double-click **Services**.

Windows 2000: Select **Start / Programs / Administrative Tools / Services**.

Windows 2003: Select **Start / Administrative Tools / Services**.

Windows XP: Select **Start / All Programs / Administrative Tools / Services**.

You can use scripts or you can use the Oracle Enterprise Manager Application Server Control to start and stop Forms and Reports Services instances. See the *Oracle Application Server 10g Administrator's Guide* for details.

7.2 Testing the Forms and Reports Services Installation

Testing the Forms and Reports Services installation would require you to have a Windows machine and a browser to invoke the OEM page of your installation.

To test your installation, perform the following steps:

1. Open the Oracle Application Server Welcome page (`http://hostname:7777`)

2. Click the **Demonstrations** tab.

3. Click the **Business Intelligence and Forms** link.

4. Click the **Forms Services** or **Reports Services** link to run a test Form or a test Report.

7.3 Backup and Recovery

Post-installation is an ideal time to set up your backup and recovery strategies and implement them. See the *Oracle Application Server 10g Administrator's Guide* for details.

7.4 SSL

By default, most components are not configured for SSL. To enable SSL for the components, view the guide for the specific components. For example, to enable SSL for Oracle HTTP Server, see the *Oracle HTTP Server Administrator's Guide*.

7.5 NLS_LANG Environment Variable

Check the value of the NLS_LANG environment variable to ensure that it is correct for your environment. See the *Oracle Application Server 10g Globalization Guide* for details, including a list of files that set this variable. You might need to edit the value of the NLS_LANG variable in these files.

7.6 Deployment of Forms and Reports Application

Table 7–1 lists the guides that outline post-installation information on how to configure and deploy Forms and Reports applications.

Table 7–1   Deploying Forms and Reports Applications

Component	Guides
Oracle Application Server Reports Services	*Oracle Application Server Reports Services Publishing Reports to the Web*
Oracle Application Server Forms Services	*Oracle Application Server Forms Services Deployment Guide*

A

Troubleshooting

This appendix lists some methods for troubleshooting your Oracle Application Server 10*g* (9.0.4) Forms and Reports Services installation. It includes the following topics:

- Section A.1, "Verify Requirements"

- Section A.2, "What to Do If an Installation Error Occurs"

- Section A.3, "Troubleshoot Configuration Assistants"

- Section A.4, "Descriptions of Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration Assistants"

A.1 Verify Requirements

Review the following information before performing any of the troubleshooting steps in this appendix:

- Ensure that the computer meets the requirements specified in Chapter 5, "Requirements".

Read the Release Notes

- Read the *Oracle Application Server 10g (9.0.4) Release Notes* prior to installing Forms and Reports Services. The release notes are available with the platform-specific documentation. The latest version of the release notes is available on OTN at:

  http://otn.oracle.com/documentation/ias.html
- Read the *Oracle Application Server 10g (9.0.4) Forms and Reports Services Release Notes*, which contain release notes for Oracle Forms Services, Oracle Forms Developer, Oracle Reports Services, and Oracle Reports Developer. In addition, the *Oracle Application Server 10g (9.0.4) Forms and Reports Services Release Notes* contains information about the features that are available in this installation type.

A.2 What to Do If an Installation Error Occurs

If you encounter an error during installation of Forms and Reports Services:

- If you entered incorrect information on one of the installation screens, return to that screen by clicking **Back** until you see the screen.

- Exit the installer only if you want to access the component log files. The log files located `ORACLE_HOME\cfgtoollogs` directory are inaccessible if the installer is still in use.

- If you encounter an error while the installer is copying or linking files, perform the following tasks:

1. Note the error and review the installation logs for causes:

   * *inventory_location*\logs\installActions*timestamp*.log

   * *inventory_location*\logs\oraInstall*timestamp*.err

   * *inventory_location*\logs\oraInstall*timestamp*.out

   The default *inventory_location* is:

   `C:\Program Files\Oracle\Inventory`

2. Remove the failed installation by following the steps in Appendix B, "Deinstallation and Reinstallation".

3. Correct the issue that caused the error.

4. Restart the installation.

A.3 Troubleshoot Configuration Assistants

To troubleshoot an installation error that occurs when the configuration assistants are running:

- Review the installation log files listed in Section A.2, "What to Do If an Installation Error Occurs".

- Review the configuration assistant log files located in the `ORACLE_HOME\cfgtoollogs` directory for a specific Forms and Reports Services configuration assistant. Section A.4, "Descriptions of Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration Assistants" also lists any other log file locations for a specific configuration assistant. Try to fix the issue that caused the error.

- If you see a "Fatal Error. Reinstall" message, try to find the cause of the problem by analyzing the log files. Refer to Section A.3.3, "Fatal Errors" for further instructions.

A.3.1 Configuration Assistant Failure

Oracle Application Server 10*g* (9.0.4) Forms and Reports Services configuration assistant failures are noted at the bottom of the installation screen. The Forms and Reports Services configuration assistant interface displays additional information, if applicable. The configuration assistant's execution status will be identified by the result. The result codes are:

Status	Result Code
Configuration Assistant Succeeded	0
Configuration Assistant Failed	1
Configuration Assistant Cancelled	-1

This result code is written to the following log file:

`C:\Program Files\Oracle\Inventory\logs\installActionstimestamp.log`

A.3.2 Failure During Component Configuration and Startup

During installation, configuration assistants run when the Configuration Assistants screen appears. If a configuration assistant fails, try the following procedure to correct the problem:

1. Review the installation log files for this Forms and Reports Services instance.

2. Review the log files for each configuration assistant located in the `ORACLE_HOME\cfgtoollogs` directory. Default log file locations are described in Section A.4, "Descriptions of Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration Assistants".

3. Refer to the section describing the configuration assistants in Section A.4, "Descriptions of Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration Assistants".

    a. If the failing configuration assistant has any dependencies, then run the dependencies again. You must do this even if the dependency completed successfully.

    b. Run the failing configuration assistant again. If you are using the installer, select the configuration assistant and click **Retry**.

       If the configuration assistant fails again after you click **Retry**, then you must remove the lock entry and try re-running the configuration assistant again.

    c. If an optional configuration assistant fails, and it does not have any dependencies, run the remaining configuration assistants. Uncheck the cancelled optional configuration assistant, highlight and check the next listed configuration assistant, and click **Retry**.

    d. If configuration assistant failure occurs when running configuration assistant execution commands on the command line, then re-run the configuration assistant execution command again.

       You can use the generated script file named `configToolCommands` located in the `ORACLE_HOME\cfgtoollogs` directory to execute the failed configuration assistant again. The configToolCommands script is generated after you exit the installer. During silent or non-interactive installation of Forms and Reports Services the configToolCommands script is generated immediately after configuration assistant failure.

       You must set the following environment variables before using the generated script:

       – Set the `ORACLE_HOME` environment variable to the `ORACLE_HOME` path.

       – Append the `PATH` environment variable with `ORACLE_HOME\lib` and `ORACLE_HOME\network\lib`.

       – For the Register DCM Plug-Ins With EM Configuration Assistant only, set the `PERL5LIB` environment variable to the `ORACLE_HOME\perl\lib\5.6.1` directory.

Note: If the description of a configuration assistant includes an "Initial Tasks" section, you must perform these tasks before running the configuration assistant.

A.3.3 Fatal Errors

Some configuration assistant failures are "fatal errors". You cannot recover from a fatal error by correcting the problem and continuing. You must remove the current installation and reinstall Forms and Reports Services. The following tasks describe the recovery procedure:

1. Deinstall the failed installation using the procedure described in Section B.1, "Deinstallation of 10g (9.0.4) Instances".

2. Correct the cause of the fatal error.

3. Reinstall Oracle Application Server 10g (9.0.4) Forms and Reports Services.

4. If the fatal error reoccurs, then you must remove all Oracle installations from your computer using the procedure in Section B.2, "Deinstalling All Oracle Products Manually".

A.3.4 OC4J Instance Configuration Assistant Errors

If the OC4J Instance Configuration Assistant fails with the following error:

```
Adding dependent libraries for application 'portal'...done.
Deploying application 'oraudrepl' to OC4J instance 'OC4J_Portal'...
ERROR: Caught exception during deploy.
java.rmi.RemoteException: deploy failed!: ; nested exception is:
oracle.oc4j.admin.internal.DeployerException: User specified for
application-client uddirepl, 'uddi_replicator' not found
at com.evermind.server.rmi.RMIConnection.
EXCEPTION_ORIGINATES_FROM_THE_REMOTE_SERVER(RMIConnection.java:1520)
... lines omitted ...
```

This error is seen when you are installing a middle tier against an Oracle Internet Directory that was upgraded from 9.2.0.x to 10g (9.0.4), but not all the upgrade steps were completed. Make sure you followed the steps on upgrading Oracle Internet Directory 9.2.0.x to 10g (9.0.4) as documented in the *Oracle Application Server 10g Upgrading to 10g (9.0.4)* guide. The instructions are in the "Upgrading the Identity Management Services" chapter.

A.4 Descriptions of Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration Assistants

Table A–1 lists the Forms and Reports Services configuration assistants in alphabetical order. Different installations use different configuration assistants depending on installation type and configuration options you selected.

Table A–1   Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration Assistants

Configuration Assistant	Description	Log File Location
Application Server Control Configuration Assistant	The Application Server Control Configuration Assistant starts the Oracle Management Agent and the Application Server Control to deploy applications through the Oracle Enterprise Manager Application Server Control.	NA
BC4J Configuration Assistant	The BC4J Configuration Assistant integrates BC4J with the Oracle Enterprise Manager Application Server Control. This configuration assistant requires the `ORACLE_HOME\jlib\ emConfigInstall.jar` file.	NA
DCM Repository Backup Assistant	The DCM Repository Backup Assistant enables you to back up your DCM repository.	NA
Forms Configuration Assistant	The Forms Configuration Assistant configures the Oracle Application Server Forms Services server and integrates Oracle Application Server Forms Services with Oracle Enterprise Manager Application Server Control.	`ORACLE_HOME\forms90\config\` `formsConfig.log`
HTTP Server Configuration Assistant	The HTTP Server Configuration Assistant configures Oracle HTTP Server and registers it with the Oracle Enterprise Manager Application Server Control.	`ORACLE_HOME\Apache\Apache\httpd.log`
Java Security Configuration Assistant	The Java Security Configuration Assistant changes default password and sets and reassigns new passwords for JAAS security.	`ORACLE_HOME\cfgtoollogs\jaznca.log`
OC4J Configuration Assistant	The OC4J Configuration Assistant integrates OC4J with the Oracle Enterprise Manager Application Server Control. It uses the Oracle Enterprise Manager Application Server Control-provided APIs to perform the following steps: ■ Add entries to the `targets.xml` file ■ Add entries to the `iasadmin.properties` file ■ This configuration assistant is dependent on the presence of the `deploy.ini` file.	NA
OC4J Instance Configuration Assistant	The OC4J Instance Configuration Assistant configures OC4J instances for deployed Oracle Application Server 10*g* (9.0.4) Forms and Reports Services applications.	NA
OPMN Configuration Assistant	The OPMN Configuration Assistant starts OPMN and OPMN-managed processes.	`ORACLE_HOME\opmn\logs\opmn.log`
OPMN Configuration Assistant- start Oracle HTTP Server	Starts Oracle HTTP Server through OPMN.	`ORACLE_HOME\opmn\logs\HTTP_` `Server.log`
OPMN Configuration Assistant- start DAS instance	Starts DAS instance through OPMN.	`ORACLE_HOME\opmn\logs\opmn.log`

Table A–1   (Cont.) Oracle Application Server 10g (9.0.4) Forms and Reports Services Configuration

Configuration Assistant	Description	Log File Location
Oracle Net Configuration Assistant	The Oracle Net Configuration Assistant configures the database listener and configures the mid-tier Oracle Application Server 10*g* (9.0.4) Forms and Reports Services instances to use the LDAP naming by default.	`ORACLE_HOME\oraInventory\logs\` `installActions<time.stamp>.log`
OracleAS Instance Configuration Assistant	The OracleAS Instance Configuration Assistant adds Oracle Application Server 10*g* (9.0.4) Forms and Reports Services instance name into the `ORACLE_HOME\config\ targets2add.xml` file	`NA`
Register DCM Plug-Ins With EM Configuration Assistant	Registers DCM plug-ins with Enterprise Manager.	`NA`
Reports Configuration Assistant	The Reports Configuration Assistant configures the Oracle Application Server Reports Services server and integrates Oracle Application Server Reports Services with Oracle Enterprise Manager Application Server Control.	`ORACLE_HOME\reports\config\` `reportsConfig.log`
Web Cache Configuration Assistant	The Web Cache Configuration Assistant configures OracleAS Web Cache and registers it with Oracle Enterprise Manager Application Server Control.	`ORACLE_HOME\webcache\log\log.xml`

B

Deinstallation and Reinstallation

This appendix guides you through the deinstallation and reinstallation process for Oracle Application Server 10*g* (9.0.4) Forms and Reports Services.

> **Note:** Forms and Reports Services is a flexible product that you can start and stop in different ways, depending on your requirements. Before you either deinstall or reinstall the product, see the *Oracle Application Server 10g Administrator's Guide* for more information on stopping all related services or processes.

Contents:

- Section B.1, "Deinstallation of 10g (9.0.4) Instances"
- Section B.2, "Deinstalling All Oracle Products Manually"
- Section B.3, "Reinstallation"

B.1 Deinstallation of 10*g* (9.0.4) Instances

To deinstall Forms and Reports Services instances, you have to clean up the items listed in Table B–2.

The installation procedures, described later in this appendix, provide steps on how to delete these items. They also provide details on how to clean up the items that require manual steps.

Table B–1 Items to Deinstall

Item to Clean Up	Tool to Use
Files from the Oracle home directory	Installer
	If the installer does not remove all the files, you can remove the remaining files using the `del` command.
Entries for the deleted instance in the Inventory directory	Installer
Instance name from Farm page	Installer
Entries for the deleted instance in the Windows registry	Installer

The installer does not permit custom deinstallation of individual components.

B.2 Deinstalling All Oracle Products Manually

The following procedure removes all Oracle products from your computer.

Caution: These instructions remove *all* Oracle components, services, and registry entries from your computer. Exercise extreme care when removing registry entries. Removing incorrect entries can cause your computer to stop working.

---

1. Delete Registry keys.

   a. Select **Start > Run**, type in **regedit**, and click **OK**. This displays the Registry Editor.

   b. Delete the following folders from the Registry. To delete a folder, select it and select **Edit > Delete** from the menu.

      * **HKEY_LOCAL_MACHINE** > **SOFTWARE** > **ORACLE**

      * **HKEY_LOCAL_MACHINE** > **SYSTEM** > **CurrentControlSet** > **Services** > **ORACLE**

      * **HKEY_LOCAL_MACHINE** > **SYSTEM** > **ControlSet** *X* > **Services** > **ORACLE**

        X is a number, for example, ControlSet001.

      * **HKEY_CURRENT_USER** > **Software** > **ORACLE**

      * **HKEY_CLASSES_ROOT** > **ORACLE**

   c. If you are running on Windows NT, delete the following additional folders:

      * **HKEY_LOCAL_MACHINE** > **SOFTWARE** > **Apache Group** > **Apache 1.X.X**

        If the **ServerRoot** path points to an existing Oracle home, select and delete **Apache Group**.

      * **HKEY_LOCAL_MACHINE** > **SOFTWARE** > **classes** > **ORACLE**.

   d. Exit the Registry Editor.

2. Edit/delete environment variables.

   To display environment variables:

   - Windows 2000: Right click **My Computer** and select **Properties**. Select the **Advanced** tab, then click **Environment Variables**.

   - Windows NT: Right click **My Computer** and select **Properties**. Then select the **Environment** tab.

   a. Delete the following system variables if they exist:

      – `DISCO_JRE`

      – `DISCO_VBROKER`

      – `VBROKER_JAVAVM`

      – `VBROKER_TAG -D`

      – `WV_GATEWAY_CFG`

    b. Modify the Path system variable to remove all references to any previous Oracle home paths.

        – Windows 2000:

        Highlight the Path system variable. Click the **Edit** button and modify the path in the **Variable Value** field.

        – Windows NT:

        Highlight the Path system variable. Modify the path in the **Value** field.

        For example, the following shows an Oracle-modified Path system variable:

```
C:\ias904\iSuites\BIN;C:\ias904\806\bin;C:\ias904\iSuites\Apache\Perl\5
.00503\bin\mswin32-x86;C:\ProgramFiles\Oracle\jre\1.1.7\bin;C:\WINNT\sy
stem32;C:\WINNT;C:\WINNT\System32\Wbem;C:\ias904\806\vbroker\bin;C:\ias
904\806\jdk\bin
```

        The following shows the Path system variable after removal of the Oracle home references:

```
C:\WINNT\system32;C:\WINNT;C:\WINNT\System32\Wbem
```

3. Click **OK**

4. Remove Oracle program folders.

Windows 2000:

- Click **Start > Programs.** Remove Oracle folders by right clicking on the folder and selecting Delete.

Window NT:

a. Click **Start > Programs > Windows NT Explorer**.

b. On the installation hard drive go to **WINNT\Profiles\All Users\Start Menu\Programs**.

c. Right click and delete each Oracle directories.

d. Go to **WINNT\Profiles\All Users\Start Menu\Programs\Startup.**

e. Right click and delete each Oracle icon.

5. Delete the Oracle user.

Windows 2000:

a. Click **Start > Settings > Control Panel > Administrative Tools > Computer Management > Local Users and Groups > Users**. Open the Users folder and delete the user name for installation of Oracle applications.

b. Exit Administrative Tools.

c. Double click **My Computer** on your desktop. Inspect the Documents and Settings directories on your hard drive and delete any Oracle user entries.

d. Exit My Computer.

Windows NT:

a. Click **Start > Programs > Administrative Tools > User Manager**. Under the Username column, highlight the user name for installation of Oracle applications. Select **Delete from the User menu**.

     b. Exit the User Manager.

     c. Click **Start > Programs > Windows NT Explorer**. Go to WINNT\Profiles on the installation hard drive and remove the user for installation of Oracle applications.

     d. Exit Windows NT Explorer.

6. For Windows NT, delete Oracle folders in the `TEMP` directory.

     a. Click **Start > Programs > Windows NT Explorer**

     b. Open the `TEMP` directory on your installation hard drive and delete the `Install Guide` and `OraInstall` directories.

     c. Exit Windows NT Explorer.

7. Reboot your computer.

8. After your computer reboots, remove existing Oracle home directories from your hard drive.

Click **Start > Programs > Windows NT Explorer**. Delete any Oracle home directories that are displayed on your installation hard drive.

For example:

```
C:\Oracle\*, C:\Program Files\Oracle\*
```

9. Exit Windows NT Explorer.

10. Reboot your computer.

B.3 Reinstallation

The installer does not allow reinstallation of an Forms and Reports Services instance in a directory that already contains an Forms and Reports Services instance. To reinstall Forms and Reports Services in the same directory, you have to deinstall and then install it.

C

URLs for Components

Table C–1 shows the URLs and login IDs to use to access components after installation.

The URLs in the table use the default ports. The components in your environment might use different ports. To determine the port numbers for components, you can look in the `ORACLE_HOME\install\portlist.ini` file.

Table C–1 URLs for Components

Component	URL	Entry in portlist.ini	Login and Password
OracleAS Welcome Pages	http://*host*:80	Oracle HTTP Server port or Web Cache Listen port	n/a
Oracle HTTP Server	http://*host*:80 (without Web Cache) http://*host*:80 (with Web Cache)	Oracle HTTP Server Listen port	n/a
Oracle Application Server Forms Services	http://*host*:80/forms90/f90servlet	Web Cache Listen port	n/a
Oracle Application Server Reports Services	http://*host*:80/reports/rwservlet/getserverinfo	Web Cache Listen port	`orcladmin` Password: The default password for `orcladmin` is the same as the `ias_admin` password you supplied during installation.
Oracle Enterprise Manager Application Server Control	http://*host*:1810	Application Server Control port	`ias_admin` Password: Use the `ias_admin` password you supplied during installation.

D

Java Access Bridge Installation

This appendix describes how to install the Java Access Bridge. Java Access Bridge enables use of a screen reader with Oracle components.

Contents:

D.1 Introduction

The Java Access Bridge enables assistive technologies, such as the JAWS screen reader, to read Java applications running on the Windows platform. Assistive technologies can read Java-based interfaces, such as the Oracle Universal Installer and the Oracle Enterprise Manager Application Server Control.

Your Oracle Application Server 10*g* (9.0.4) Forms and Reports Services CD-ROMs contain the Java Runtime Environment (JRE) 1.4.1 that is used by the Oracle Universal Installer during installation. The JRE enables use of the Java Access Bridge during installation. To install and configure Java Access Bridge after you install Oracle components, see Section D.3, "Setup for Oracle Installed Components" on page D-1.

D.2 Setup for JRE 1.4.2

To set up Java Access Bridge with JRE 1.4.2, run the following batch file on Oracle installation media.

```
DRIVE_LETTER:\install\access_setup.bat
```

After the batch file has run, restart your assistive technology program.

D.3 Setup for Oracle Installed Components

This section describes how to install and configure Java Access Bridge for Windows after installing Oracle components. This section contains the following topics:

D.3.1 Installing Java Access Bridge

To install Java Access Bridge, follow these steps:

1. On the Oracle installation media, go to the `AccessBridge` directory.

2. Select the `accessbridge-1_0_4.zip` file and extract its files to the system where you plan to install Access Bridge. For example:

   `c:\AccessBridge-1.0.4`

3. Copy the Java Access Bridge files listed in Table D–1 into the JRE 1.4.2 directory used by Oracle components. By default, the JRE used by Oracle components is installed in:

   ORACLE_BASE\ORACLE_HOME\jre\1.4.2

   Table D–1 lists the files you need to copy from the Java Access Bridge location on your hard drive to the JRE directory used by Oracle components:

Table D–1   Copy Files to JRE Directory

Copy	To
`\AccessBridge-1_0_4\installer \` `installerFiles\jaccess-1_4.jar`	*ORACLE_BASE* *ORACLE_HOME*\jre\1.4.2\ `lib\ext`
`\AccessBridge-1_0_4\installer \` `installerFiles\access-bridge.jar`	*ORACLE_BASE* *ORACLE_HOME*\jre\1.4.2\ `lib\ext`
`\AccessBridge-1_0_4\installer \` `installerFiles\JavaAccessBridge.dll`	*windows_ directory*\ `system32`
`\AccessBridge-1_0_4\installer installerFiles\` `WindowsAccessBridge.dll`	*windows_ directory*\ `system32`
`\AccessBridge-1_0_4\installer \` `installerFiles\JAWTAccessBridge.dll`	*windows_ directory*\ `system32`
`\AccessBridge-1_0_4\installer \` `installerFiles\accessibility.properties`	*ORACLE_BASE* *ORACLE_HOME*\jre\1.4.2\ `lib`

4. Rename `jaccess-1_4.jar` (now located in *ORACLE_BASE\ORACLE_HOME*\jre\1.4.2\lib\ext) to `jaccess.jar`.

5. Following a successful installation, you can access Java Access Bridge documentation located at:

   `c:\AccessBridge-1.0.4\doc`

D.3.2 Configuring Oracle Components to Use Java Access Bridge

You can configure Oracle components to use the Access Bridge after you complete the installation. To do so, you need to set the system variable `ORACLE_OEM_CLASSPATH` to point to the installed Java Access Bridge files.

D.3.2.1 Configuring for Windows NT

To configure Oracle components to use Access Bridge on Windows NT, follow these steps:

1. Select **Start > Settings > Control Panel > System** to display the Windows System Control Panel.

2. Select the Environment tab.

3. Select a variable in the **System Variables** list.

4. In the **Variable** field, enter ORACLE_OEM_CLASSPATH.

5. In the **Value** field, enter the full path to jaccess.jar and
   access-bridge.jar.

   Use a semicolon to separate the two paths. Do not use quotes or space characters.
   For example, if JRE 1.4.2 is installed in the default location, the setting would be:

   ```
   c:\oracle\product\10.1.0\Db_
   1\jre\1.4.2\lib\ext\jaccess.jar;c:\oracle\product\10.1.0\Db_
   1\jre\1.4.2\lib\ext\access-bridge.jar
   ```

6. Click **Set.**

7. Click **OK**.

D.3.2.2 Configuring for Windows 2000, Windows XP, or Windows Server 2003

To configure Oracle components to use Access Bridge on Windows 2000, Windows
XP, or Windows Server 2003, follow these steps:

1. Select **Start > Settings > Control Panel > System** to display the Windows System
   Control Panel.

2. Select the Advanced tab.

3. Click the **Environment Variables** button.

4. Click the **New** button under the System Variable list. The New System Variable
   dialog appears.

5. In the **Variable Name** field, enter ORACLE_OEM_CLASSPATH.

6. In the **Variable Value** field, enter the full path to jaccess.jar and
   access-bridge.jar.

   Use a semicolon to separate the two paths. Do not use quotes or character spaces.
   For example, if JRE 1.4.2 is installed in the default location, the setting would be:

   ```
   c:\oracle\product\10.1.0\Db_
   1\jre\1.4.2\lib\ext\jaccess.jar;c:\oracle\product\10.1.0\Db_
   1\jre\1.4.2\lib\ext\access-bridge.jar
   ```

7. Click **OK**.

Index

format, 3-3
steps, summary of, 2-1
summary of installation steps, 2-1

T

TEMP directory, 5-6, 6-4
   space required, 5-2
TEMP environment variable, 5-6
testing, 7-1
troubleshooting, A-1, A-3
   configuration assistants, A-2
   fatal errors, A-4
   installation errors, A-1
   verify requirements, A-1

U

URLs for components, C-1
users (operating system)
   see operating system users

V

virtual memory (pagefile size) requirement, 5-3
VNC, 5-21

W

Windows system files (wsf.exe), 5-4
wsf.exe, 5-4